ICOM

SERVICE MANUAL

VHF MARINE TRANSCEIVER

IC-M73
IC-M73EURO

S-14919XZ-C1
April 2013

Icom Inc.

INTRODUCTION

This service manual describes the latest technical information for the **IC-M73, IC-M73EURO** VHF MARINE TRANSCEiVER, at the time of publication.

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<tr><th>MODEL</th><th>VERSION</th><th>AC ADAPTER</th><th>FLEXIBLE ANTENNA</th></tr>
<tr><td rowspan="4">IC-M73</td><td>USA</td><td>BC-123SA</td><td rowspan="4">FA-S64V</td></tr>
<tr><td>EXP</td><td>BC-123SE</td></tr>
<tr><td>USA-10</td><td>BC-123SA</td></tr>
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<tr><td>HOL</td></tr>
<tr><td>AUS</td><td>BC-123SV</td></tr>
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<tr><td>FRG-10</td><td rowspan="2">BC-123SE</td></tr>
<tr><td>HOL-10</td></tr>
<tr><td>AUS-10</td><td>BC-123SV</td></tr>
</table>

CAUTION

NEVER connect the transceiver to an AC outlet or to a DC power supply that uses more than the specified voltage. This will ruin the transceiver.

DO NOT reverse the polarities of the power supply when connecting the transceiver.

DO NOT apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front-end.

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.



(IC-M73EURO)

ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit Icom part number
2. Component name
3. Equipment model name and unit name
4. Quantity required

<ORDER EXAMPLE>

1110003491	S.IC	TA31136FNG	IC-M73	MAIN UNIT	5 pieces
8820001210	Screw	2438 screw	IC-M73	Top cover	10 pieces

Addresses are provided on the inside back cover for your convenience.

REPAIR NOTES

1. Make sure that the problem is internal before dis-assembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool MUST be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a Standard Signal Generator or a Sweep Generator.
7. **ALWAYS** connect a 30 dB to 40 dB attenuator between the transceiver and a Deviation Meter or Spectrum Analyzer, when using such test equipment.
8. **READ** the instructions of the test equipment thoroughly before connecting it to the transceiver.

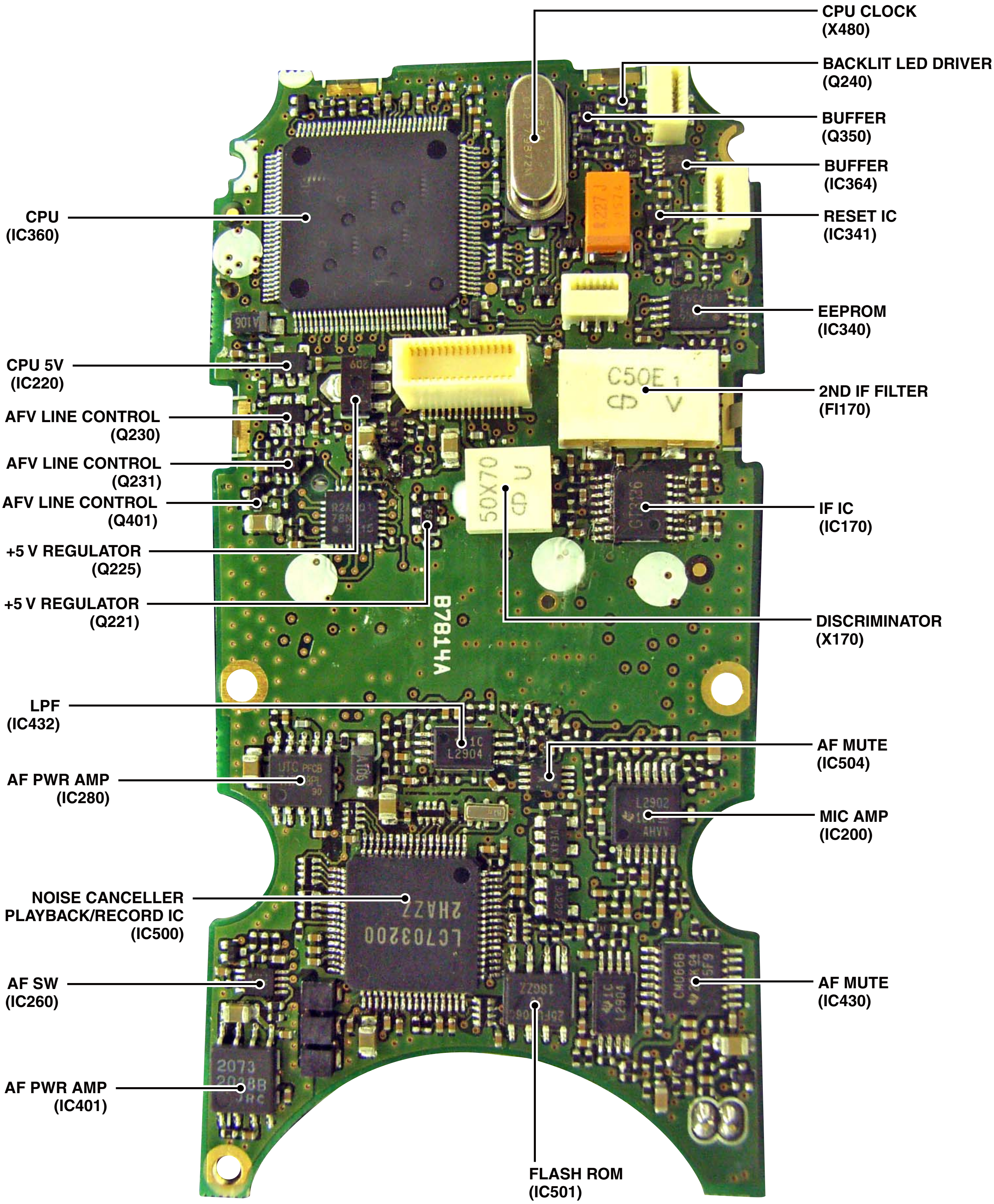
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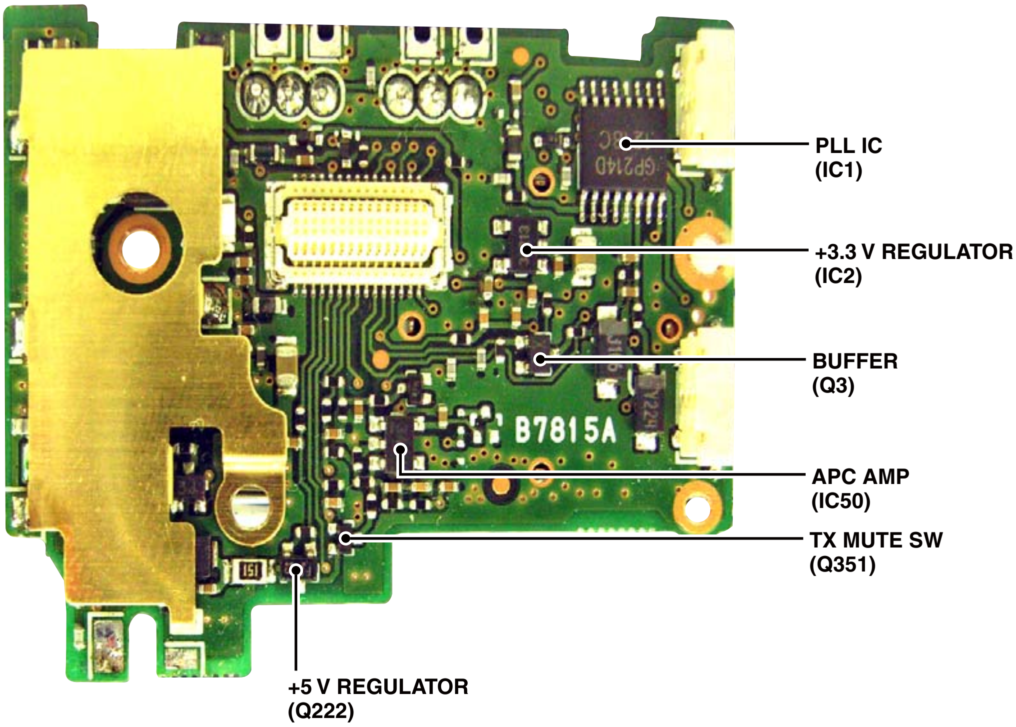
	Item			IC-M73	IC-M73EURO	IC-M73EURO (AUS version)
GENERAL	• Frequency coverage	TX		156.025–157.425 MHz	156.000–161.450 MHz	156.025–157.425 MHz
		RX		156.050–163.275 MHz	156.000–163.425 MHz	156.300–162.025 MHz
	• Type of emission			16K0G3E		
	• Antenna impedance			50 Ω (nominal)		
	• Operating temperature range			–20°C to +60°C (–4°F to +140°F)	–15°C to +55°C	–10°C to +55°C
	• Power supply requirement			7.4 V DC nominal (negative ground)		
	• Current drain (approximately)	RX		0.25 A (at maximum audio, using external 8 Ω speaker)		
				0.45 A (at maximum audio, using internal speaker)		
		TX	6.0 W	1.5 A		–
			5.0 W	–		1.4 A
			3.0 W	1.2 A		
			1.0 W	0.7 A		
			0.5 W	–	0.6 A	–
	• Dimensions (projections not included)			52.5(W) × 125(H) × 30(D) mm; 2.0(W) × 4.9(H) × 1.2(D) inches		
	• Weight (approximately)			280 g; 9.9 oz (Including only BP-245N) 320 g; 11.3 oz (Including BP-245N, FA-S64V and MB-103)		
TRANSMITTER	• Output power	High		6 W	6 W (1 W for [FRG])	5 W
		Middle		3 W		
		Low		1 W	1 W (0.5 W for [FRG])	1 W
	• Modulation			Variable reactance frequency modulation		
	• Maximum frequency deviation			±5 kHz		
	• Frequency error			±10 ppm	±1.5 kHz	±10 ppm
	• Spurious emissions			–68 dBc (typical)	0.25 μW	
	• Adjacent channel power			70 dB		
	• Audio harmonic distortion			10% (at 60% deviation)		
	• FM hum and noise			40 dB		
	• Audio frequency response			+1 dB to –3 dB of 6 dB octave from 300 Hz to 3000 Hz		
	• Microphone impedance			2 kΩ		
RECEIVER	• Intermediate frequency			1st 21.7 MHz 2nd 450 kHz		
	• Sensitivity			–13 dBμ (0.22 μV) (at 12 dB SINAD) typical	–4 dBμ emf (at 20 dB SINAD) typical	–5 dBμ emf (at 20 dB SINAD) typical
	• Squelch sensitivity (at threshold)			–9 dBμ (0.35 μV) typical	–5 dBμ emf typical	–6 dBμ emf typical
	• Adjacent channel selectivity			70 dB typical	70 dB	65 dB
	• Spurious response			70 dB typical	70 dB	65 dB
	• Intermodulation rejection ratio			70 dB typical	68 dB	65 dB
	• Hum and Noise			40 dB		
	• Audio frequency response			+1 dB to –3 dB of –6 dB octave from 300 Hz to 3000 Hz		
	• Audio output power (at 10% distortion with an 8 Ω load)			0.35 W typical (External)	0.2 W (External)	
				0.7 W typical (Internal)	0.7 W typical (Internal) at 1 kHz	
	• Output impedance (audio)			8 Ω		

All stated specifications are subject to change without notice or obligation.

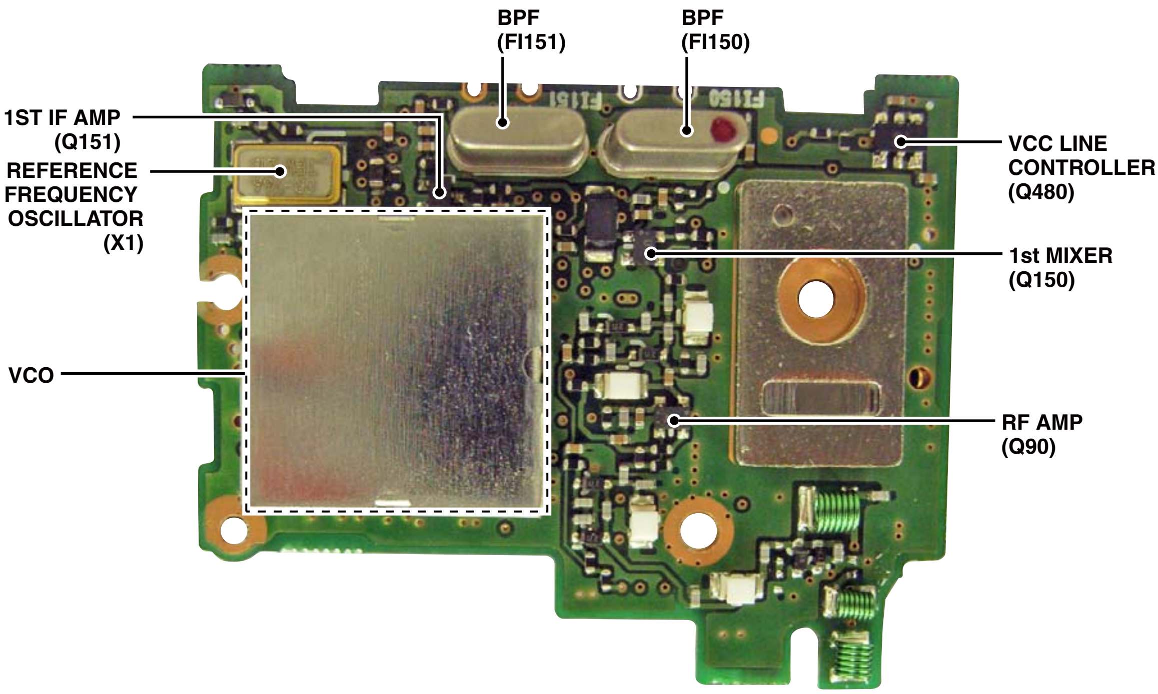
• MAIN UNIT


CPU CLOCK
(X480)
BACKLIT LED DRIVER
(Q240)
BUFFER
(Q350)
BUFFER
(IC364)
RESET IC
(IC341)
EEPROM
(IC340)
2ND IF FILTER
(FI170)
IF IC
(IC170)
DISCRIMINATOR
(X170)
AF MUTE
(IC504)
MIC AMP
(IC200)
AF MUTE
(IC430)
FLASH ROM
(IC501)
CPU
(IC360)
CPU 5V
(IC220)
AFV LINE CONTROL
(Q230)
AFV LINE CONTROL
(Q231)
AFV LINE CONTROL
(Q401)
+5 V REGULATOR
(Q225)
+5 V REGULATOR
(Q221)
LPF
(IC432)
AF PWR AMP
(IC280)
NOISE CANCELLER
PLAYBACK/RECORD IC
(IC500)
AF SW
(IC260)
AF PWR AMP
(IC401)

• RF UNIT
(TOP VIEW)



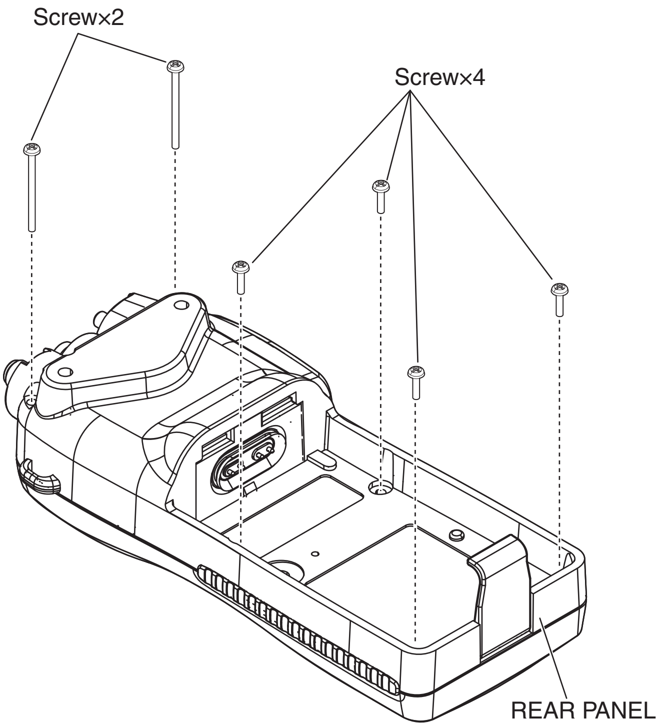
• RF UNIT
(BOTTOM VIEW)



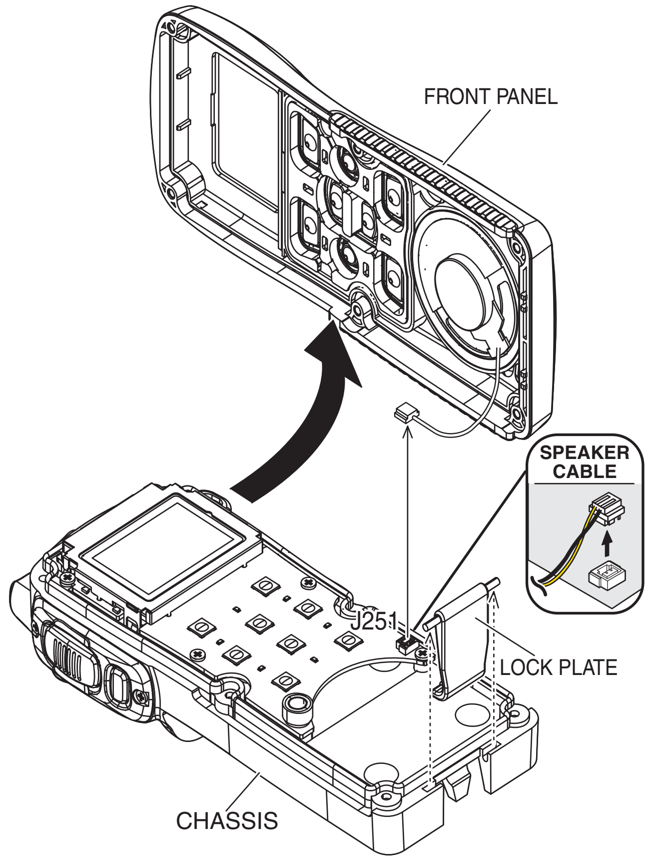
SECTION 3 DISASSEMBLY INSTRUCTION

1. Removing the Front panel

1) Remove 6 screws from the rear panel.

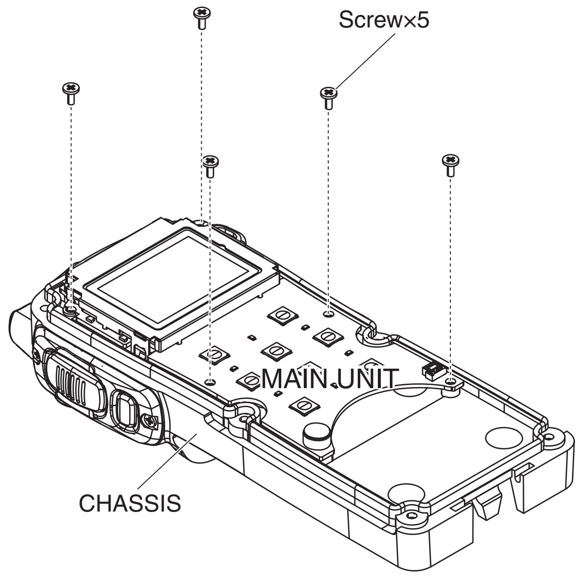


2) Disconnect the speaker cable from the MAIN UNIT and remove the front pannel form rear. (The lock plate is simultaneously come off.)



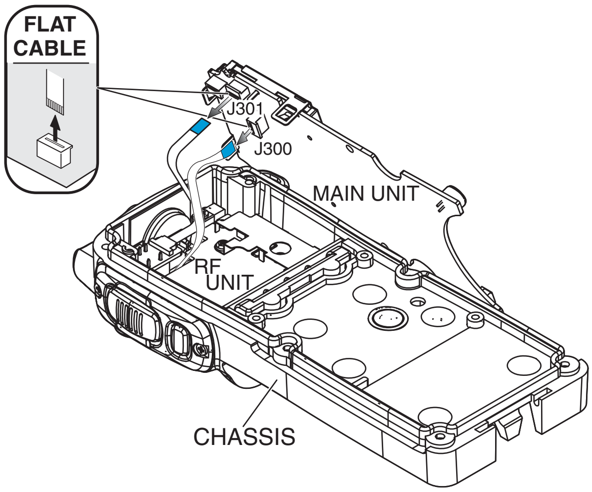
2. Removing the MAIN UNIT

1) Remove 5 screws from the MAIN UNIT.



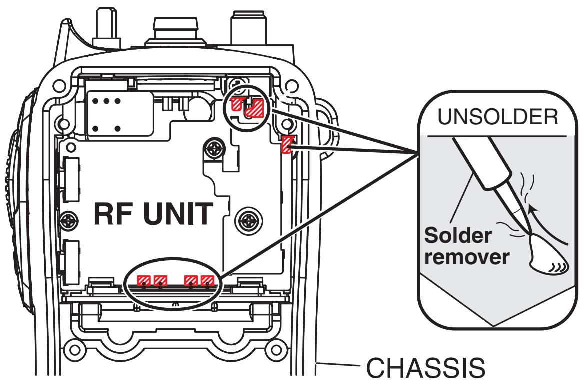
2) Disconnect 2 flat cables from the MAIN UNIT.
3) Remove the MAIN UNIT from the CHASSIS.

BE CAREFUL about the **flat cable** and **connector** when separating the MAIN UNIT from the CHASSIS.

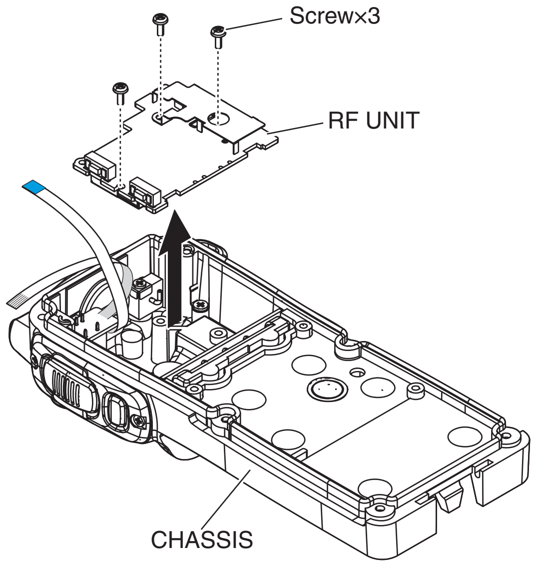


3. Removing the RF UNIT

1) Unsolder total of 7 points.



2) Remove 3 screws from the RF UNIT.
3) Remove the RF UNIT from the CHASSIS.



SECTION 4 CIRCUIT DESCRIPTION

4-1 RECEIVE CIRCUIT

• ANTENNA SWITCH (RF UNIT)

The received signal from the antenna connector are passed through the low-pass filter (LPF; L81, L82, C83−C86 and C89) and the antenna switch (D90), which toggles the receive (RX) line and transmit (TX) line.

While transmitting, the voltage on the T5V line is applied to D52 and D90, and these are ON. Thus the TX line is connected to the antenna, and RX line is connected to the ground to prevent transmit signal entering.

While receiving, no voltage is applied to D52 and D90, and these are OFF. Thus the TX line is disconnected from the antenna to prevent received signal entering, and RX line is disconnected from the ground and L90, C90 and C91 compose a two-staged LPF, which guides received signal to the RX circuits.

The received signal is applied to the RF circuits.

• RF CIRCUITS (RF UNIT)

The RF circuit amplifies received signal within the frequency coverage. The received signal is filtered at the bandpass filter (BPF) and amplified at the RF amplifier.

The received signal from the antenna switch is passed through the two-staged tunable BPFs (D92, L92, C95, C97 and D93, L93, C99, C100) to filter out unwanted signal. The filtered signal is applied to the RF amplifier (Q90). The amplified signal is then applied to the 1st mixer (Q150), through another two-staged tunable BPF (D130, L96, C110, C112 and D131, L97, C114, C115).

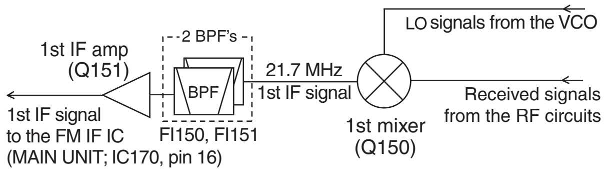
• 1st IF CIRCUITS (RF UNIT)

The received signal is converted into the 1st IF signal, and amplified at the 1st IF circuits.

The amplified received signal from the RF circuits are applied to the 1st mixer (Q150), and mixed with the 1st local oscillator (LO) signal from the VCO (Q21, Q22, D20−D22), resulting in the 21.7 MHz 1st IF signal.

The converted 1st IF signal is passed through two 1st IF filters (FI150 and FI151) to filter out unwanted signal, and then applied to the 1st IF amplifier (Q151). The amplified 1st IF signal is applied to the IF IC (MAIN UNIT: IC170, pin 16).

• 1st IF CIRCUITS



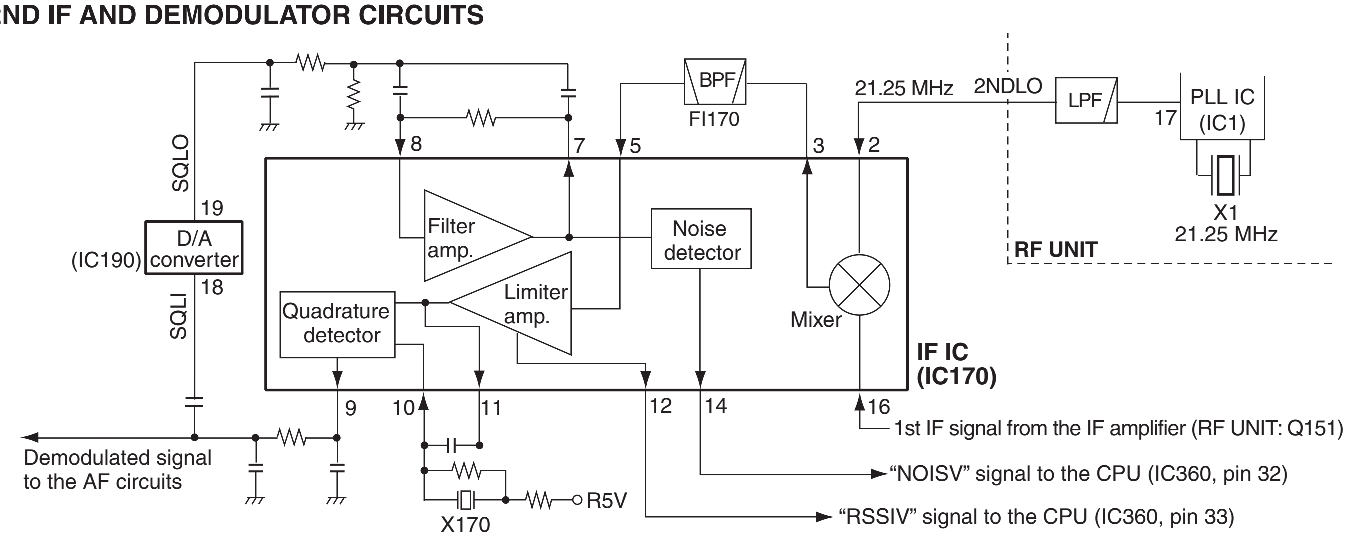
• 2nd IF AND DEMODULATOR CIRCUITS (MAIN UNIT)

The 1st IF signal is converted into the 2nd IF signal, and demodulated.

The 1st IF signal from the 1st IF circuits is applied to the 2nd IF mixer in the IF IC (IC170) and mixed with the 21.25 MHz 2nd LO signal from the reference oscillator (RF UNIT: IC1, X1), resulting in the 450 kHz 2nd IF signal.

The converted 2nd IF signal is output from pin 3, and passed through the 2nd IF filter (FI170) to suppress sideband noise. The filtered signal is amplified by the limiter amplifier (IC170, pin 5) and FM-demodulated by the quadrature detector with the discriminator (X170), and then output from pin 9. The demodulated AF signal is applied to the AF circuits.

• 2ND IF AND DEMODULATOR CIRCUITS



• AF CIRCUITS (MAIN UNIT)

The demodulated AF signal from the demodulator circuits is amplified and filtered in AF amplifier circuits.

The demodulated AF signal from the IF IC (IC170, pin 9) is passed through the AF mute switch (IC430, pins 10, 11), LPF (IC432) and variable register (VR UNIT: R801) which adjusts the AF signal in level.

The level-adjusted AF signal is passed through the de-emphasis circuit (R286, C280 and C285) to obtain –6 dB of audio characteristic, and passed through the AF switch (IC260, pins 1, 6), and then applied to the AF power amplifier (IC401, pin 7) to obtain 0.6 W of output power. The power-amplified AF signal is then output from pin 1, and applied to the internal speaker, through J251.

When an external speaker-microphone or headset is attached to the [SP MIC] connector (MIC UNIT: J416), the de-emphasized AF signal is passed through the AF switch (IC260, pins 1, 7) and applied to the AF power amplifier (IC280, pin 4) to obtain 0.2 W of output power. The power-amplified AF signal is output from pin 10, and then applied to the external speaker, through the [SP MIC] connector (MIC UNIT: J416).

• SQUELCH CIRCUIT (MAIN UNIT)

The squelch mutes the AF output signal when no RF signal is received. By detecting noise components in the demodulated AF signal, the squelch circuit toggles the AF power amplifier ON and OFF.

A portion of the demodulated AF signal from the IF IC (IC170, pin 9) is applied to the D/A converter (MAIN UNIT: IC190, pin 18) for level adjustment (squelch threshold adjustment). The level-adjusted AF signal is output from pin 19, and passed through the noise filter (R174–R176, C179 and C180). The only filtered noise signal is applied to the noise amplifier in the IF IC (IC170, pins 7, 8).

The amplified noise components are converted into the pulse-type signal at the noise detector section, and output from pin 19 as the "NOISV1" signal. The signal is amplified by the Amplifier (IC432) and then applied to the CPU (IC360, pin 32), and the CPU outputs "AFVS" signal from pin 100, depending on the "NOISV1" signal level, to the AF power regulator (Q230, Q231 and Q401), which turns the AF power amplifiers (IC280 and IC401) ON or OFF.

4-2 TRANSMIT CIRCUITS

• MICROPHONE AMPLIFIER CIRCUITS (MAIN UNIT)

The AF signal from the microphone (MIC signal) is filtered and level-adjusted at microphone amplifier circuits.

The AF signal from the microphone is passed through the MIC mute switch (IC430A, pins 1, 2).

While an external microphone is connected to the [SP MIC] connector (MIC UNIT: J416), the MIC mute switch shuts out the MIC signal from the internal microphone (MC1).

The AF signal from the MIC mute switch (IC430A, pins 1, 2) is passed through another AF mute switch (IC430B, pins 3, 4), and applied to the microphone amplifier (IC200B, pins 6, 7). The amplified MIC signal is passed through AF mute switch (IC430, pins 8, 9), and is applied to the D/A converter (IC190) and adjusted in level (=deviation adjustment).

The level-adjusted MIC (MOD) signal is passed through the pre-emphasis circuit (R201 and C450) to obtain +3 dB of characteristic. The pre-emphasized signal is then applied to the limiter amplifier (IC200D, pins 13, 14), which limits the amplitude of the MIC signal to prevent over deviation.

The amplitude-limited MIC signal is then passed through the splatter filter (IC200A, pins 1, 3), which suppresses the 3 kHz and higher audio components, and then applied to the modulation circuit (RF UNIT: D20).

• MODULATION CIRCUIT (RF UNIT)

The modulation circuit modulates the VCO oscillating signal using the AF signal from the microphone.

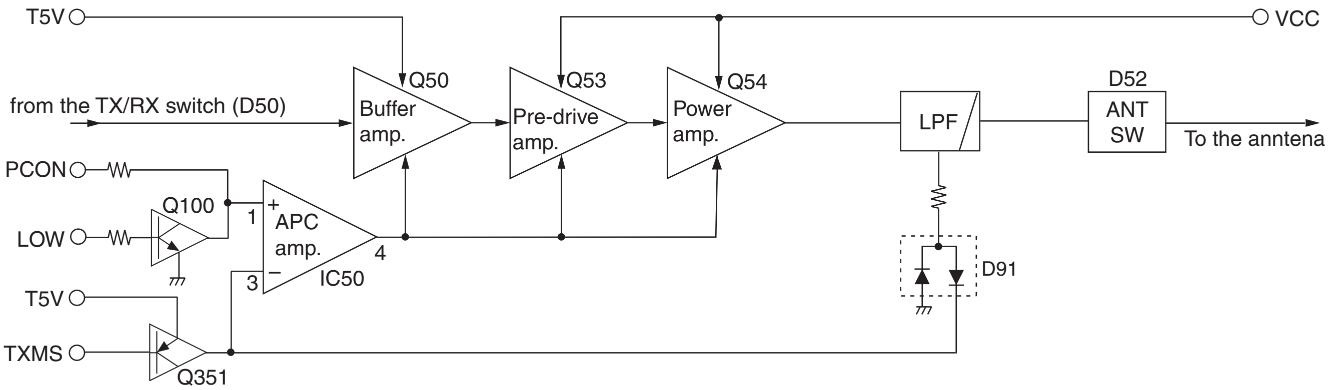
The MIC signal from the microphone amplifier circuits is applied to the D20, and modulate the VCO oscillating signal by changing the reactance of D20. The modulated VCO output signal is buffer-amplified by Q23 and Q24, and then applied to transmit amplifier circuits, through the TX/RX switch (D50).

• TRANSMIT AMPLIFIERS (RF UNIT)

The VCO output signal is amplified to the transmit output power level by the transmit amplifiers.

The transmit signal from the TX/RX switch (D50) is amplified by the buffer amplifier (Q50), and then further amplified by the pre-driver (Q53) and power amplifier (Q54) to the transmit output level. The power-amplified transmit signal is passed through the TX power detector of APC circuit (D91), antenna switch (D52) and LPF (as a harmonic filter; L81, L82, C83–C86 and C89), before being applied to the antenna connector (CHASSIS: J1).

• APC CIRCUIT



• APC CIRCUIT (RF UNIT)

The APC (Automatic Power Control) circuit stabilizes transmit output power to prevent transmit output power level change which is caused by load mismatching or heat effect, etc. The APC circuit also selects transmit output power from high, middle and low power.

The power detector circuits (D91) detects the transmit output and converts it into DC voltage, which is in proportion to the transmit output power level. The detected voltage is applied to the differential amplifier (IC50, pin 3). The transmit power setting voltage "PCON" is also applied to another input terminal (pin 1) as the reference voltage.

The differential amplifier compares the detected voltage and reference voltage, and the voltage difference is output from pin 4. The output voltage controls the bias of the pre-drive (Q53) and power AMP (Q54) to adjust the gain of them for stable transmit output power.

The transmit power is set by the changing reference voltage "PCON" and "TCON/LOW."

4-3 FREQUENCY SYNTHESIZER

• VCO CIRCUIT (RF UNIT)

The VCO (Q21, Q22, D20–D22) generates the both of transmit signal and LO signal for the 1st IF conversion. The VCO output signal is buffer-amplified by Q23 and Q24.

While transmitting, the VCO output signal is applied to the transmit amplifier circuit, through the TX/RX switch (D50).

While receiving, the VCO output signal is applied to the 1st mixer (Q150), through the TX/RX switch (D51) and the BPF (L26 and C122), to be mixed with the received signal to produce the 21.7 MHz 1st IF signal.

A portion of the VCO output is applied to the PLL IC (IC1, pin 19), through the buffer amplifier (Q25) and LPF (L20, C21 and C22).

• PLL CIRCUIT (RF UNIT)

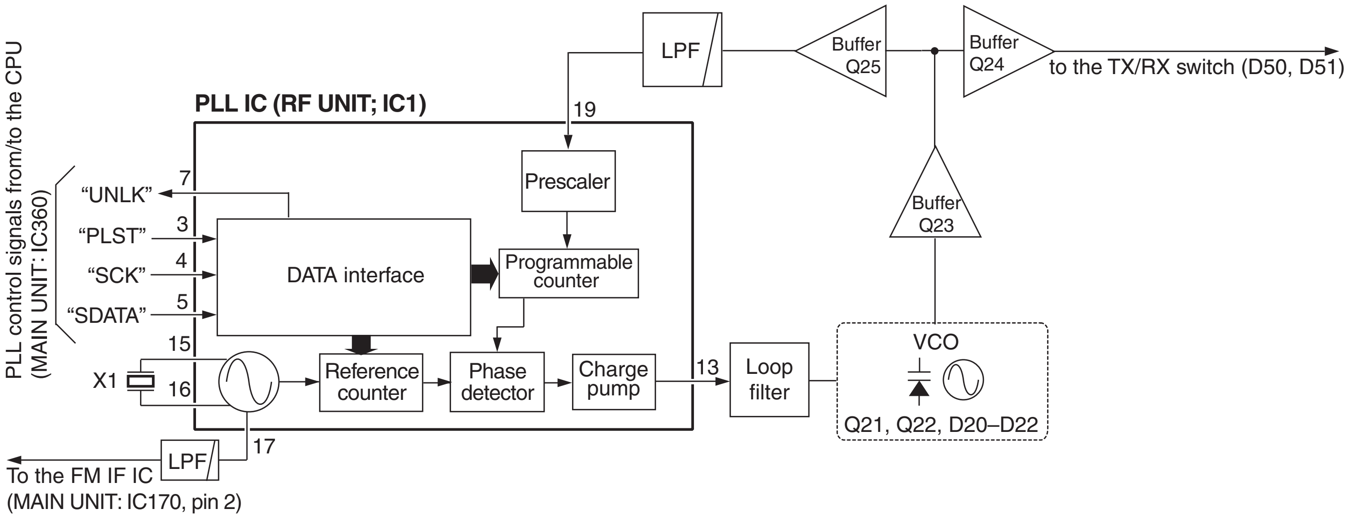
The PLL circuit provides stable oscillation of the transmit frequency and receive 1st LO frequency. The PLL output frequency is controlled by the divided ratio (N-data) from the CPU.

The buffer-amplified signal from the LPF (L20, C21 and C22) is applied to the PLL IC (IC1, pin 16). The applied signal is divided by the prescaler and programmable counter, according to the "SDATA (SDATAO)" signal from the CPU (MAIN UNIT: IC360, pin 10). The divided signal is phase-compared with the reference frequency signal, which is divided by reference counter, at the phase detector.

The phase difference is output from pin 13 as a pulse type signal after being passed through the charge pump. The output signal is converted into the DC voltage (lock voltage) by passed through the loop filter (R10, R22, C11, C13 and C24). The lock voltage is applied to the variable capacitors (D22) of the VCO (Q21, Q22, D20–D22) and locked to keep the VCO frequency constant.

If the oscillated signal drifts, its phase changes from that of the reference frequency, causing a lock voltage change to compensate for the drift in the VCO oscillating frequency.

• PLL CIRCUITS



4-4 POWER SUPPLY CIRCUITS

Line name	Description
VCC	The same voltage as attached battery pack.
CPU5V	Common 5 V converted from VCC line by the CPU5V regulator (IC220). The voltage is applied to the CPU (IC360), Reset IC (IC341), EEPROM (IC340), etc.
5V	Common 5 V converted from VCC line by the 5V regulator (Q223–Q225) controlled by "M5VS" signal from the CPU (IC360, pin 101). The voltage is applied to the backlight LED'S (DS240–DS243, DS250–DS253), D/A converter (RF UNIT: IC190), PLL IC (RF UNIT: IC1), etc.
V5V	Common 5 V converted from VCC line by the V5V regulator (RF UNIT: Q220). The voltage is applied to the VCO (RF UNIT: Q21, Q22, D20–D22)
R5V	Receive 5 V controlled by the R5V regulator (Q221) using "R5VS" signal from the CPU (IC360, pin 95). The voltage is applied to the receive circuits (RF UNIT: 1st mixer (Q150), 1st IF amplifier (Q151), RF amplifier (Q90), etc.).
T5V	Transmit 5 V controlled by the T5V regulator (RF UNIT: Q222) using "T5VS" signal from the CPU (IC360, pin 13). The controlled voltage is applied to the transmit circuits (RF UNIT: differential amplifier (IC50), pre-driver (Q53), power amplifier (Q54), microphone amplifier (IC8), etc.).

4-5 PORT ALLOCATIONS

• CPU (MAIN UNIT: IC360)

Pin No.	Port Name	Description	I/O
1	BEEP	Beep sound to the AF circuits.	O
4	DAST (DAST)	Strobe signal to the D/A converter (IC190, pin 3).	O
5	PLSTB (PLST)	PLL strobe signal to the PLL IC (RF UNIT: IC1, pin 8).	O
11	SCLK (SCK)	Serial clock signal to the PLL IC (RF UNIT: IC1, pin 6) and D/A converter (IC190, pin 4).	O
12	V5VS	V5V regulator (Q220) control signal. "High"= While in the power save mode (The VCO (Q21, Q22, D21–D23) is not activated).	O
13	T5VS	T5V regulator (RF UNIT: Q222) control signal. "Low"= While transmitting. "High"= While receiving or in the power save mode.	O
14	LCDS	LCD contrast select signal. "Low"= While "Bright" is selected. "High"= While "Dark" is selected.	O
15	LEDS	Backlight LED (DS240–DS243, DS250–DS253) control signal to the LED driver (Q240). "High"= While the backlight is ON.	O
25	RES	Reset signal from the reset IC (IC341, pin 4).	I
27†	WDECV	Demodulated weather alart (WX) signal from the AF circuit.	I
28	EXDET	External connection detect.	I
29	VOXT	Voice input detection from the VOX amplifier (IC431, pin 7) for the VOX operation.	I
30	BATTV	Remaining battery voltage.	I
31	TDETV	TX power level sensing voltage from the transmit power detector (RF UNIT: D91).	I
32	NOISV	Noise level from the IF IC (IC170, pin 14).	I
33	RSSIV	RSSI signal from the IF IC (IC170, pin 12).	I
34	LOINV	Lock voltage.	I
35	TEMPV	Temperture sensing voltage.	I
36	WET	Water leaking detection.	I
93	ESCK	Serial clock to the EEPROM (IC501, pin 6).	O
94	ESDA	Serial data to the EEPROM (IC501, pin 5).	O
95	R5VS	R5V line regulator (Q221) control. "High"= While receiving.	O
96	EXPTT	External PTT. "High"= The external PTT is pushed.	I
97	TXMS	Transmit mute switch (Q351) control. "Low"= While receiving. (Mute)	O
98	DETMS	AF mute switch (IC430, pin 12) control. "High"= While the squelch is open.	O
100	AFVS	AF power amplifier power supply switch control. "High"= While the amplifier is activated.	O
102	PTTIN	Input port for [PTT]. (RF UNIT: S250) "High": Pushed.	I
104	BTYPE	Battery type detection.	I
105	PTTM	AF mute switch (IC430, pin 13) control. "High": While transmitting. "Low": While transmitting with VOX function.	O

• CPU (MAIN UNIT: IC360) (continued)

Pin No.	Port Name	Description	I/O
106	MIC1/ SPCTRL	• While transmitting: MIC gain controller (Q450 and Q451) control. (The microphone sensitivity is determinded by the combination of output voltage of "MIC1–MIC3.") • While receiving: Analog switch (IC430, pins 6, 12) control.	O
107	MIC2/ AFVCTRL	• While transmitting: MIC gain controller (Q450 and Q451) control. • While receiving: AF amplifier power supply circuit (Q230, Q231, Q401 and Q540) control.	O
108	MIC3/ BPCTRL	• While transmitting: MIC gain controller (Q450 and Q451) control. • While recseiving: AquaQuake function control. "Low": AquaQuake function is activated.	O
109	SQL	Input port for the [SQL] key (RF UNIT: S250). "Low": While the [SQL] key is pushed.	I
110	UP	Input port for the [▲] key (MAIN UNIT: S321). "Low": When the [▲] key is pushed.	I
111	DOWN	Input port for the [▼] key (MAIN UNIT: S322). "Low": When the [▼] key is pushed.	I
112	CH/WX	Input port for the [CH/WX] key (MAIN UNIT: S324). "Low": When the [CH/WX] key is pushed.	I
113	16	Input port for the [16/C] key (MAIN UNIT: S320). "Low": When the [16/C] key is pushed.	I
114	SCAN	Input port for the [SCAN] key (MAIN UNIT: S324). "Low": When the [SCAN] key is pushed.	I
115	H/L	Input port for the [H/L] key (MAIN UNIT: S329). "Low": When the [H/L] key is pushed.	I
117	VOXM	AF mute switch (IC430, pin 5) control. "High": While transmitting.	O
119	UNLK	PLL unlock signal from the PLL IC (IC1, pin 5). "High": While the PLL is unlocked.	I

• D/A CONVERTER (RF UNIT: IC190)

Pin No.	Port Name	Description
2	MODC	Deviation adjustment.
3	FCON	Reference frequency adjustment.
10	PCON	Transmit power setting voltage.
11	ATTS	Attenuator (RF UNIT: D94) switching signal. "High"=The attenuator (RF UNIT: D94) is activated.
15	LOW	Transmit power setting signal. "High"=TX power [High] or [Mid] is selected. "Low"=TX power [LOW] is selected.
22	TCON/ LOW	• While receiving: BPFs (RF UNIT: D130, L96, C110, C112 and D131, L97, C114, C115) tuning voltage. • While transmitting: Transmit power setting voltage.

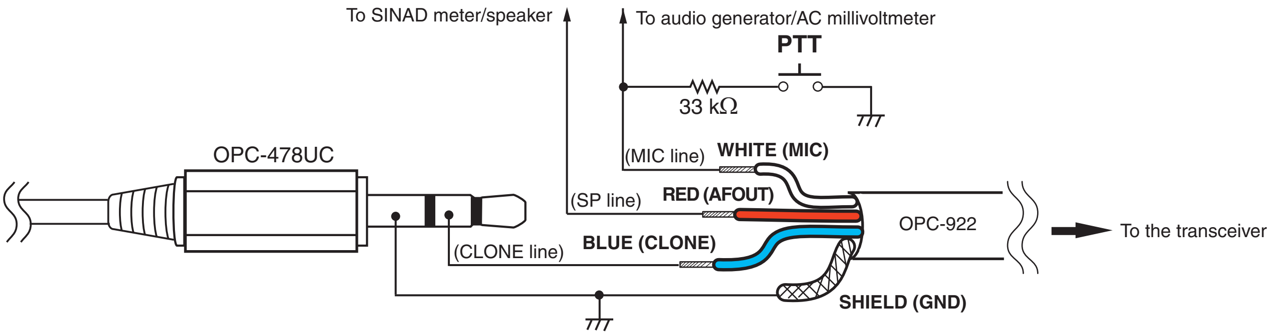
SECTION 5 ADJUSTMENT PROCEDURE

5-1 PREPARATION

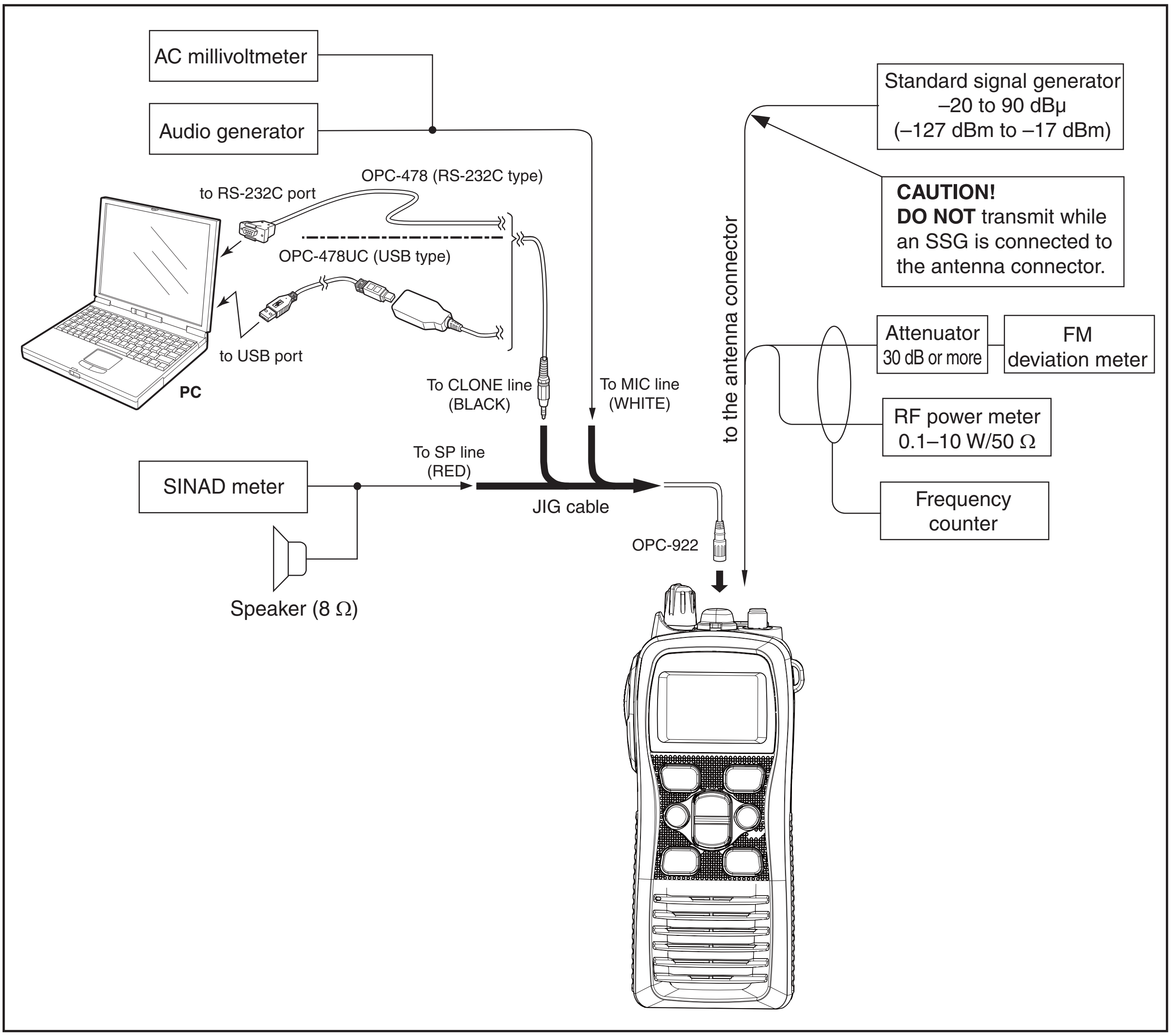
■ REQUIRED EQUIPMENTS

EQUIPMENT	GRADE AND RANGE	EQUIPMENT	GRADE AND RANGE
Cloning software	ADJ-M73 ADJUSTMENT SOFTWARE (Revision 1.0 or later)	JIG cable	Modified OPC-478UC and OPC-922 (See the illust below)
RF power meter (50 Ω terminated)	Measuring range : 0.1–10 W Frequency range : 100–300 MHz SWR : Less than 1.2 : 1	Frequency counter	Range : 0.1–300 MHz Accuracy : ±1 ppm or better Input level : Less than 1 mW
Modulation Analyzer	Frequency range : 30–300 MHz Measuring range : 0 to ±10 kHz	Standard signal generator (SSG)	Frequency range : 0.1–300 MHz Output level : –20 dBμ to 90 dBμ (–127 to –17 dBm)
AC millivoltmeter	Measuring range : 10 mV to 10 V		
Oscilloscope	Frequency range : DC–20 MHz Measuring range : 0.01–20 V	Attenuator	Attenuation : 30 dB Capacity : More than 10 W
Audio generator (AG)	Frequency range : 300–3000 Hz Output level : 1–500 mV	External speaker	Input impedance : 8 Ω Capacity : More than 1 W

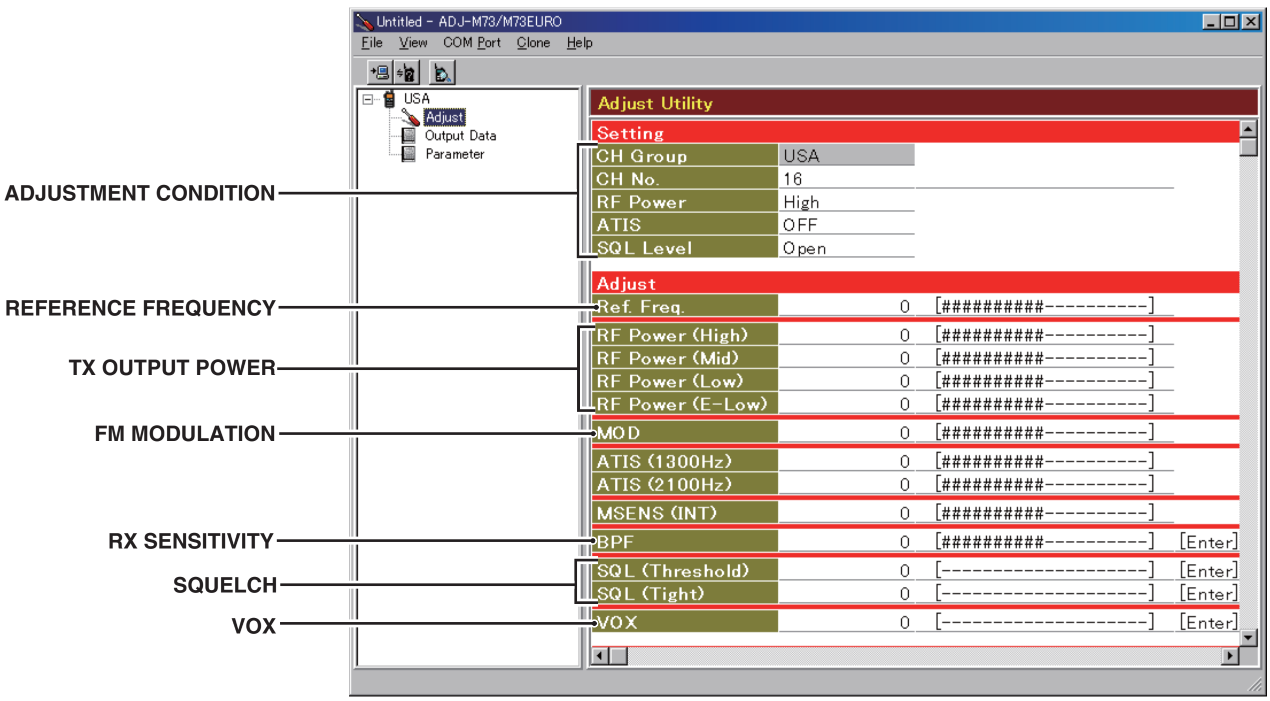
■ JIG CABLE



CONNECTION



ADJUSTMENT UTILITY

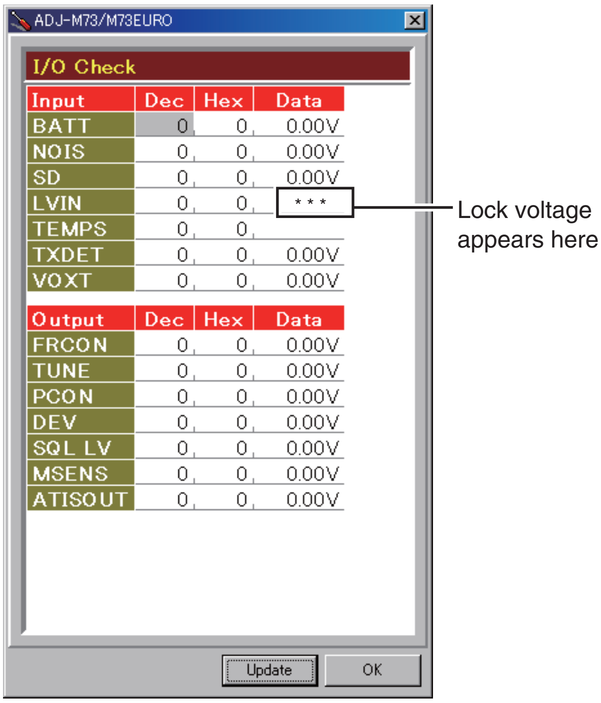


5-2 SOFTWARE ADJUSTMENT (FREQUENCY ADJUSTMENTS)

1) Select an adjustment item using [↑]/[↓] on the PC's keyboard.
2) Set or modify the adjustment value as specified using [←]/[→] on the PC's keyboard, and then push [ENTER].

ADJUSTMENT		ADJUSTMENT CONDITION	MEASUREMENT		VALUE
			UNIT	OPERATION	
PLL LOCK VOLTAGE (Verify)	1	• Operating CH. : 16 • Receiving	PC screen	Click the "I/O check button" on the ADJ-M73's screen (see page 5-3) to open the I/O check window as below.	1.55–2.65 V (Verify)
	2	• Operating CH. : 16 • Connect a dummy load or RF power meter to the antenna connector. • Transmitting			
REFERENCE FREQUENCY [Ref Freq]	1	• Operating CH. : 16 • Connect the RF power meter or a 50 Ω dummy load to the antenna connector. • Transmitting	Top Panel	Loosely couple the frequency counter to the antenna conector.	156.8000 MHz

• I/O Check window



(The values shown above are exsample only.
Each transceiver has own values.)

5-3 SOFTWARE ADJUSTMENT (RECEIVE AND TRANSMIT)

1) Select an adjustment item using [↑]/[↓] on the PC's keyboard.
2) Set or modify the adjustment value as specified using [←]/[→] on the PC's keyboard, and then push [ENTER].

ADJUSTMENT		ADJUSTMENT CONDITION	MEASUREMENT		VALUE
			UNIT	OPERATION	
RECEIVE SENSITIVITY [BPF T1] [BPF T2]	1	• Operating CH. : 16 • Connect the SSG to the antenna connector, and then set it as; Frequency : 156.8000 MHz Level : +30 dBu* (–77 dBm) Modulation : 1 kHz Deviation : ±3.0 kHz • Receiving	Top pannel	Put the cursor on the [BPF ALL Sweep] on the ADJ-M73's screen, and push the [ENTER] key.	Automatic adjustment
SQUELCH LEVEL [SQL Threshold]	"RECEIVE SENSITIVITY" must be adjusted before "SQUELCH LEVEL" is adjusted. Otherwise, "SQUELCH LEVEL" will not be properly adjusted.				
	1	• Operating CH. : 16 • Connect the SSG to the antenna connector, and then set it as; Frequency : 156.8000 MHz Level* : –12dBu (–119 dBm)*1 –11 dBu (–118 dBm)*2 Modulation : 1 kHz Deviation : ±3.0 kHz • Receiving	Top panel	Push the [ENTER] key on the keyboad of the connected PC.	Automatic adjustment
[SQL Tight]	2	• Set the SSG as; Frequency : 156.8000 MHz Level* : –4 dBu (–111 dBm)*1 –3 dBu (–110 dBm)*2			
TRANSMIT OUTPUT POWER [RF Power (High)]	1	• Operating CH. : 16 • RF power : High • Transmitting	Top panel	Connect the RF power meter to the antenna connector.	5.6 W (Except [AUS], [AUS-1]) 4.7 W ([AUS], [AUS-1])
[RF Power (Middle)]	2	• Operating CH. : 16 • RF power : Middle • Transmitting			3.0 W
[RF Power (Low)]	3	• Operating CH. : 16 • RF power : Low • Transmitting			0.75 W
[RF Power (E-Low)]	4	• Operating CH. : 16 • RF power : Low • Transmitting			0.45 W
FM DEVIATION [MOD]	1	• Operating CH. : 16 • Set the FM deviation meter as; HPF : OFF LPF : 20 kHz De-emphasis : OFF Detector : (P–P)/2 • Connect the audio generator to the [SP/MIC] jack, through OPC-922, and then set it as; Frequency : 1 kHz Waveform : Sin Level : 25 mV rms • Transmitting	Top panel	Connect the FM deviation meter to the antenna con-nector, through the attenuator.	±4.30–4.40 kHz

*The output level of the standard signal generator (SSG) is indicated as the SSG's open circuit.
*1; For [USA], [EXP] and [AUS] versions.
*2; Except [USA], [EXP] and [AUS] versions.

SECTION 6 PARTS LIST

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC170	1110008140	S.IC GT3136 <SEI>	B	51.2/33.0
IC190	1110007550	S.IC R2A20178NP	B	51.4/11.6
IC200	1110006350	S.IC LM2902PWR	B	29.7/33.6
IC220	1180003830	S.REG NJU7772F05-TE1-#ZZZB	B	63.3/6.6
IC260	1130009981	S.IC TC7W53FK(TE85LF)	B	16.6/4.9
IC280	1110007850	S.IC TA7368PL-R10-R <SLVJ>	B	31.8/8.0
IC340	1130015560	S.IC S-24C64CI-T8T1U3	B	66.7/37.8
IC341	1110007620	S.IC NJU7704F3-42A-TE1-#ZZZB	B	73.9/34.8
IC360	1140016550	S.IC UPD780338GC-519-9EB-A	B	74.3/12.7
IC364	1130016110	S.IC TC7WH14FK(TE85LF)	B	78.4/36.5
IC401	1110002420	S.IC NJM2073M-TE1-#ZZZB	B	9.5/3.8
IC430	1130011770	S.IC CD4066BPWR	B	17.8/36.9
IC431	1110006380	S.IC LM2904PWR	B	15.9/31.3
IC432	1110006380	S.IC LM2904PWR	B	34.3/20.1
IC500	1190003590	S.IC LC703200AW-8C01-H [USA-10]	B	21.4/16.4
	1190003590	S.IC LC703200AW-8C01-H [EXP-10]		
	1190003590	S.IC LC703200AW-8C01-H [EUR-11]		
	1190003590	S.IC LC703200AW-8C01-H [EUR-10]		
	1190003590	S.IC LC703200AW-8C01-H [UK-10]		
	1190003590	S.IC LC703200AW-8C01-H [FRG-10]		
	1190003590	S.IC LC703200AW-8C01-H [HOL-10]		
	1190003590	S.IC LC703200AW-8C01-H [AUS-10]		
IC501	1130016740	S.IC LE25U40CMC-AH [USA-10]	B	16.3/25.7
	1130016740	S.IC LE25U40CMC-AH [EXP-10]		
	1130016740	S.IC LE25U40CMC-AH [EUR-11]		
	1130016740	S.IC LE25U40CMC-AH [EUR-10]		
	1130016740	S.IC LE25U40CMC-AH [UK-10]		
	1130016740	S.IC LE25U40CMC-AH [FRG-10]		
	1130016740	S.IC LE25U40CMC-AH [HOL-10]		
	1130016740	S.IC LE25U40CMC-AH [AUS-10]		
IC502	1180003980	S.REG XC6221A332MR-G [USA-10]	B	23.5/27.0
	1180003980	S.REG XC6221A332MR-G [EXP-10]		
	1180003980	S.REG XC6221A332MR-G [EUR-11]		
	1180003980	S.REG XC6221A332MR-G [EUR-10]		
	1180003980	S.REG XC6221A332MR-G [UK-10]		
	1180003980	S.REG XC6221A332MR-G [FRG-10]		
	1180003980	S.REG XC6221A332MR-G [HOL-10]		
	1180003980	S.REG XC6221A332MR-G [AUS-10]		
IC503	1180004200	S.REG XC6221A152MR-G [USA-10]	B	27.9/27.0
	1180004200	S.REG XC6221A152MR-G [EXP-10]		
	1180004200	S.REG XC6221A152MR-G [EUR-11]		
	1180004200	S.REG XC6221A152MR-G [EUR-10]		
	1180004200	S.REG XC6221A152MR-G [UK-10]		
	1180004200	S.REG XC6221A152MR-G [FRG-10]		
	1180004200	S.REG XC6221A152MR-G [HOL-10]		
	1180004200	S.REG XC6221A152MR-G [AUS-10]		
IC504	1130011741	S.IC TC7W66FK(TE85LF) [USA-10]	B	32.2/26.2
	1130011741	S.IC TC7W66FK(TE85LF) [EXP-10]		
	1130011741	S.IC TC7W66FK(TE85LF) [EUR-11]		
	1130011741	S.IC TC7W66FK(TE85LF) [EUR-10]		
	1130011741	S.IC TC7W66FK(TE85LF) [UK-10]		
	1130011741	S.IC TC7W66FK(TE85LF) [FRG-10]		
	1130011741	S.IC TC7W66FK(TE85LF) [HOL-10]		
	1130011741	S.IC TC7W66FK(TE85LF) [AUS-10]		
Q221	1510001151	S.TRA L2SA1576AST1G <SLVJ>	B	51.2/17.4
Q223	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	55.3/15.7
Q224	1590003800	S.TRA KTC811U-GR-RTK/P	B	58.0/14.9
Q225	1520000840	S.TRA KTA1664Y-RTF/P	B	61.4/11.9
Q230	1550000090	S.FET RSQ035P03TR	B	59.4/6.4
Q231	1590003800	S.TRA KTC811U-GR-RTK/P	B	55.4/6.4
Q240	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	83.6/32.2
Q250	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	10.7/40.7
Q350	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	82.2/29.6
Q361	1510001151	S.TRA L2SA1576AST1G <SLVJ>	B	78.5/32.8
Q401	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	52.9/3.9
Q430	1590004310	S.TRA LDTA114EET1G <SLVJ>	B	11.6/36.1
Q470	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	18.7/2.7
Q500	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	84.2/7.2
Q542	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	68.5/23.6
Q550	1590004070	S.TRA LDTC144EET1G <SLVJ> [USA-10]	B	67.1/20.8
	1590004070	S.TRA LDTC144EET1G <SLVJ> [EXP-10]		
	1590004070	S.TRA LDTC144EET1G <SLVJ> [EUR-11]		
	1590004070	S.TRA LDTC144EET1G <SLVJ> [EUR-10]		
	1590004070	S.TRA LDTC144EET1G <SLVJ> [UK-10]		
	1590004070	S.TRA LDTC144EET1G <SLVJ> [FRG-10]		
	1590004070	S.TRA LDTC144EET1G <SLVJ> [HOL-10]		
	1590004070	S.TRA LDTC144EET1G <SLVJ> [AUS-10]		
Q551	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	69.9/36.3
Q552	1560001360	S.FET 2SK3019 TL [USA-10]	B	72.1/28.1
	1560001360	S.FET 2SK3019 TL [EXP-10]		
	1560001360	S.FET 2SK3019 TL [EUR-11]		
	1560001360	S.FET 2SK3019 TL [EUR-10]		
	1560001360	S.FET 2SK3019 TL [UK-10]		
	1560001360	S.FET 2SK3019 TL [FRG-10]		
	1560001360	S.FET 2SK3019 TL [HOL-10]		
	1560001360	S.FET 2SK3019 TL [AUS-10]		
Q553	1560001360	S.FET 2SK3019 TL [USA-10]	B	68.4/26.1
	1560001360	S.FET 2SK3019 TL [EXP-10]		
	1560001360	S.FET 2SK3019 TL [EUR-11]		
	1560001360	S.FET 2SK3019 TL [EUR-10]		
	1560001360	S.FET 2SK3019 TL [UK-10]		
	1560001360	S.FET 2SK3019 TL [FRG-10]		
	1560001360	S.FET 2SK3019 TL [HOL-10]		
	1560001360	S.FET 2SK3019 TL [AUS-10]		

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
D350	1750001810	S.DIO L1SS400T1G <SLVJ>	B	80.3/29.4
D430	1750002020	S.DIO DA2S10100L	B	21.3/30.4
D431	1750001850	S.DIO LDAN222T1G <SLVJ>	B	70.6/34.0
X170	6070000310	S.DIS JTBM450CX70 <JJE>	B	53.3/23.5
X480	6050012460	S.XTA CR-834(SMD-49/7.9872 MHz) <JJE>	B	79.2/25.6
X481	6060000880	S.CER CSTCE8M19G55 [USA-10]	B	29.5/21.8
	6060000880	S.CER CSTCE8M19G55 [EXP-10]		
	6060000880	S.CER CSTCE8M19G55 [EUR-11]		
	6060000880	S.CER CSTCE8M19G55 [EUR-10]		
	6060000880	S.CER CSTCE8M19G55 [UK-10]		
	6060000880	S.CER CSTCE8M19G55 [FRG-10]		
	6060000880	S.CER CSTCE8M19G55 [HOL-10]		
	6060000880	S.CER CSTCE8M19G55 [AUS-10]		
L10	6200002861	S.COI NLV25T-4R7J [USA-10]	B	13.5/9.5
	6200002861	S.COI NLV25T-4R7J [EXP-10]		
	6200002861	S.COI NLV25T-4R7J [EUR-11]		
	6200002861	S.COI NLV25T-4R7J [EUR-10]		
	6200002861	S.COI NLV25T-4R7J [UK-10]		
	6200002861	S.COI NLV25T-4R7J [FRG-10]		
	6200002861	S.COI NLV25T-4R7J [HOL-10]		
	6200002861	S.COI NLV25T-4R7J [AUS-10]		
L11	6200002861	S.COI NLV25T-4R7J [USA-10]	B	11.0/9.5
	6200002861	S.COI NLV25T-4R7J [EXP-10]		
	6200002861	S.COI NLV25T-4R7J [EUR-11]		
	6200002861	S.COI NLV25T-4R7J [EUR-10]		
	6200002861	S.COI NLV25T-4R7J [UK-10]		
	6200002861	S.COI NLV25T-4R7J [FRG-10]		
	6200002861	S.COI NLV25T-4R7J [HOL-10]		
	6200002861	S.COI NLV25T-4R7J [AUS-10]		
L12	6200002861	S.COI NLV25T-4R7J [USA-10]	B	16.0/9.5
	6200002861	S.COI NLV25T-4R7J [EXP-10]		
	6200002861	S.COI NLV25T-4R7J [EUR-11]		
	6200002861	S.COI NLV25T-4R7J [EUR-10]		
	6200002861	S.COI NLV25T-4R7J [UK-10]		
	6200002861	S.COI NLV25T-4R7J [FRG-10]		
	6200002861	S.COI NLV25T-4R7J [HOL-10]		
	6200002861	S.COI NLV25T-4R7J [AUS-10]		
R160	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	49.7/15.0
R170	7030009280	S.RES ERJ2GEJ 391 X	B	51.3/28.0
R171	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	52.9/28.0
R172	7030005000	S.RES ERJ2GEJ 471 X (470)	B	54.1/28.5
R173	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	50.4/37.0
R174	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	53.7/37.0
R175	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	54.5/38.8
R176	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	55.8/38.0
R192	7030009280	S.RES ERJ2GEJ 391 X	B	51.2/7.2
R193	7030005000	S.RES ERJ2GEJ 471 X (470)	B	54.8/12.9
R194	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	50.3/7.2
R201	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	34.4/31.9
R202	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	34.5/33.7
R203	7030006610	S.RES ERJ2GEJ 394 X (390K)	B	34.4/31.0
R204	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	31.0/30.3
R206	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	32.6/29.3
R207	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	32.6/30.5
R212	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	25.0/32.6
R213	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	23.8/31.8
R214	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	22.6/31.3
R222	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	49.4/17.5
R223	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	52.9/16.7
R226	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	56.2/14.4
R227	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	62.5/14.9
R228	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	57.8/16.7
R230	7030005720	S.RES ERJ2GEJ 563 X (56K)	B	57.1/4.4
R231	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	56.2/4.4
R232	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	54.4/4.4
R233	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	56.0/8.2
R234	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	53.4/5.9
R235	7030010010	S.RES ERJ2RKF 334 X (330K)	B	59.3/9.5
R236	7030010020	S.RES ERJ2RKF 1503X (150K)	B	58.2/10.4
R240	7030008280	S.RES ERJ2GEJ 271 X (270)	B	64.8/3.8
R241	7030005010	S.RES ERJ2GEJ 681 X (680)	B	71.0/38.7
R243	7030008280	S.RES ERJ2GEJ 271 X (270)	B	64.4/39.2
R244	7030005010	S.RES ERJ2GEJ 681 X (680)	B	69.8/39.1
R250	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	12.7/38.0
R251	7030005000	S.RES ERJ2GEJ 471 X (470)	B	14.5/38.7
R252	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	9.6/38.1
R253	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	24.2/34.6
R255	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	25.4/35.3
R256	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	22.6/33.7
R257	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	24.5/36.0
R258	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	23.3/35.5
R260	7030006610	S.RES ERJ2GEJ 394 X (390K)	B	11.1/34.6
R261	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	11.7/33.7
R262	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	9.5/33.7
R263	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	35.5/27.7
R264	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	21.1/38.3
R265	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	14.3/34.6
R271	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	35.4/14.2
R272	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	35.7/15.1
R273	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	34.5/15.4
R274	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	32.5/14.2

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R275	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	32.7/15.4
R276	7030006610	S.RES ERJ2GEJ 394 X (390K)	B	31.9/17.6
R277	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	31.9/19.2
R278	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	36.9/17.8
R279	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	36.9/16.9
R280	7030005290	S.RES ERJ2GEJ 682 X (6.8K)	B	14.8/6.0
R283	7030007260	S.RES ERJ2GEJ 330 X (33)	B	34.7/11.1
R284	7030005530	S.RES ERJ2GEJ 100 X (10)	B	36.4/5.7
R286	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	18.3/4.6
R288	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	19.6/6.0
R289	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	19.6/5.1
R290	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	19.6/4.2
R300	7030005290	S.RES ERJ2GEJ 682 X (6.8K)	B	35.4/28.9
R340	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	64.4/37.6
R341	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	65.8/33.2
R343	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	72.0/34.8
R346	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	79.3/28.9
R351	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	80.3/31.6
R352	7030005290	S.RES ERJ2GEJ 682 X (6.8K)	B	79.1/30.6
R353	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	76.6/34.1
R376	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	34.1/30.1
R377	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	31.0/29.4
R378	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	28.6/29.4
R379	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	27.0/30.3
R396	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	74.4/36.9
R397	7030010040	S.RES ERJ2GEJ-JPW	B	82.1/32.8
R399	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	25.0/31.7
R401	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	13.9/6.0
R402	7030005530	S.RES ERJ2GEJ 100 X (10)	B	5.0/2.5
R430	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	9.8/35.9
R431	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	21.4/37.1
R433	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	11.7/28.6
R434	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	17.4/29.0
R435	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	21.2/32.5
R436	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	20.2/31.6
R437	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	20.2/30.0
R438	7030007310	S.RES ERJ2GEJ 155 X (1.5M)	B	21.0/27.9
R439	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	11.3/32.4
R440	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	11.6/30.7
R441	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	10.4/32.4
R442	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	11.7/29.5
R449	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	81.2/31.8
R454	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	35.6/35.2
R456	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	77.7/39.1
R495	7410001220	S.ARR EXB28V103JX	B	71.3/22.7
R496	7410001320	S.ARR EXB28V183JX	B	70.9/25.6
R498	7030009150	S.RES ERJ2GEJ 824 X (820K)	B	83.8/12.2
R499	7030007310	S.RES ERJ2GEJ 155 X (1.5M)	B	83.8/10.3
R500	7030007060	S.RES ERJ2GEJ 684X (680K)	B	84.2/9.1
R501	7030008300	S.RES ERJ2GEJ 184 X (180K)	B	83.3/9.1
R502	7030010040	S.RES ERJ2GEJ-JPW [USA-10]	B	65.9/19.2
	7030010040	S.RES ERJ2GEJ-JPW [EXP-10]		
	7030010040	S.RES ERJ2GEJ-JPW [EUR-11]		
	7030010040	S.RES ERJ2GEJ-JPW [EUR-10]		
	7030010040	S.RES ERJ2GEJ-JPW [UK-10]		
	7030010040	S.RES ERJ2GEJ-JPW [FRG-10]		
	7030010040	S.RES ERJ2GEJ-JPW [HOL-10]		
	7030010040	S.RES ERJ2GEJ-JPW [AUS-10]		
R521	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	11.4/38.1
R540	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	60.1/8.6
R541	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	57.2/6.8
R542	7030010040	S.RES ERJ2GEJ-JPW	B	36.9/20.5
R545	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	34.4/34.7
R546	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	31.7/36.8
R547	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	33.3/36.5
R548	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	32.6/38.6
R549	7030010040	S.RES ERJ2GEJ-JPW	B	33.3/37.4
R550	7410001220	S.ARR EXB28V103JX [USA-10]	B	29.4/17.7
	7410001220	S.ARR EXB28V103JX [EXP-10]		
	7410001220	S.ARR EXB28V103JX [EUR-11]		
	7410001220	S.ARR EXB28V103JX [EUR-10]		
	7410001220	S.ARR EXB28V103JX [UK-10]		
	7410001220	S.ARR EXB28V103JX [FRG-10]		
	7410001220	S.ARR EXB28V103JX [HOL-10]		
	7410001220	S.ARR EXB28V103JX [AUS-10]		
R551	7410001220	S.ARR EXB28V103JX [USA-10]	B	29.2/11.8
	7410001220	S.ARR EXB28V103JX [EXP-10]		
	7410001220	S.ARR EXB28V103JX [EUR-11]		
	7410001220	S.ARR EXB28V103JX [EUR-10]		
	7410001220	S.ARR EXB28V103JX [UK-10]		
	7410001220	S.ARR EXB28V103JX [FRG-10]		
	7410001220	S.ARR EXB28V103JX [HOL-10]		
	7410001220	S.ARR EXB28V103JX [AUS-10]		
R552	7410001220	S.ARR EXB28V103JX [USA-10]	B	25.0/8.5
	7410001220	S.ARR EXB28V103JX [EXP-10]		
	7410001220	S.ARR EXB28V103JX [EUR-11]		
	7410001220	S.ARR EXB28V103JX [EUR-10]		
	7410001220	S.ARR EXB28V103JX [UK-10]		
	7410001220	S.ARR EXB28V103JX [FRG-10]		
	7410001220	S.ARR EXB28V103JX [HOL-10]		
	7410001220	S.ARR EXB28V103JX [AUS-10]		
R553	7410001220	S.ARR EXB28V103JX [USA-10]	B	22.5/8.5
	7410001220	S.ARR EXB28V103JX [EXP-10]		
	7410001220	S.ARR EXB28V103JX [EUR-11]		
	7410001220	S.ARR EXB28V103JX [EUR-10]		
	7410001220	S.ARR EXB28V103JX [UK-10]		
	7410001220	S.ARR EXB28V103JX [FRG-10]		
	7410001220	S.ARR EXB28V103JX [HOL-10]		
	7410001220	S.ARR EXB28V103JX [AUS-10]		

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R554	7410001220	S.ARR EXB28V103JX [USA-10]	B	14.9/21.8
	7410001220	S.ARR EXB28V103JX [EXP-10]		
	7410001220	S.ARR EXB28V103JX [EUR-11]		
	7410001220	S.ARR EXB28V103JX [EUR-10]		
	7410001220	S.ARR EXB28V103JX [UK-10]		
	7410001220	S.ARR EXB28V103JX [FRG-10]		
	7410001220	S.ARR EXB28V103JX [HOL-10]		
	7410001220	S.ARR EXB28V103JX [AUS-10]		
R555	7410001220	S.ARR EXB28V103JX [USA-10]	B	21.2/24.3
	7410001220	S.ARR EXB28V103JX [EXP-10]		
	7410001220	S.ARR EXB28V103JX [EUR-11]		
	7410001220	S.ARR EXB28V103JX [EUR-10]		
	7410001220	S.ARR EXB28V103JX [UK-10]		
	7410001220	S.ARR EXB28V103JX [FRG-10]		
	7410001220	S.ARR EXB28V103JX [HOL-10]		
	7410001220	S.ARR EXB28V103JX [AUS-10]		
R556	7030005050	S.RES ERJ2GEJ 103 X (10K) [USA-10]	B	20.5/7.8
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EXP-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-11]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [UK-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [FRG-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [HOL-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [AUS-10]		
R557	7030005120	S.RES ERJ2GEJ 102 X (1K) [USA-10]	B	13.9/16.7
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EXP-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EUR-11]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EUR-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [UK-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [FRG-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [HOL-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [AUS-10]		
R558	7030005120	S.RES ERJ2GEJ 102 X (1K) [USA-10]	B	13.9/17.6
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EXP-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EUR-11]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EUR-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [UK-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [FRG-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [HOL-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [AUS-10]		
R559	7030005050	S.RES ERJ2GEJ 103 X (10K) [USA-10]	B	22.9/24.1
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EXP-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-11]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [UK-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [FRG-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [HOL-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [AUS-10]		
R560	7030005010	S.RES ERJ2GEJ 681 X (680) [USA-10]	B	25.9/22.5
	7030005010	S.RES ERJ2GEJ 681 X (680) [EXP-10]		
	7030005010	S.RES ERJ2GEJ 681 X (680) [EUR-11]		
	7030005010	S.RES ERJ2GEJ 681 X (680) [EUR-10]		
	7030005010	S.RES ERJ2GEJ 681 X (680) [UK-10]		
	7030005010	S.RES ERJ2GEJ 681 X (680) [FRG-10]		
	7030005010	S.RES ERJ2GEJ 681 X (680) [HOL-10]		
	7030005010	S.RES ERJ2GEJ 681 X (680) [AUS-10]		
R561	7030010040	S.RES ERJ2GEJ-JPW [USA]	B	21.1/35.4
	7030010040	S.RES ERJ2GEJ-JPW [EXP]		
	7030010040	S.RES ERJ2GEJ-JPW [EUR-01]		
	7030010040	S.RES ERJ2GEJ-JPW [EUR]		
	7030010040	S.RES ERJ2GEJ-JPW [UK]		
	7030010040	S.RES ERJ2GEJ-JPW [FRG]		
	7030010040	S.RES ERJ2GEJ-JPW [HOL]		
	7030010040	S.RES ERJ2GEJ-JPW [AUS]		
R562	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	34.5/24.3
R563	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	35.7/24.8
R564	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	34.5/25.2
R570	7030005050	S.RES ERJ2GEJ 103 X (10K) [USA-10]	B	64.8/26.1
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EXP-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-11]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [UK-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [FRG-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [HOL-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [AUS-10]		
R571	7030005050	S.RES ERJ2GEJ 103 X (10K) [USA-10]	B	65.4/20.4
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EXP-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-11]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [UK-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [FRG-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [HOL-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [AUS-10]		
R572	7030008290	S.RES ERJ2GEJ 183 X (18K) [USA-10]	B	66.4/22.8
	7030008290	S.RES ERJ2GEJ 183 X (18K) [EXP-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [EUR-11]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [EUR-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [UK-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [FRG-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [HOL-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [AUS-10]		
R573	7030008290	S.RES ERJ2GEJ 183 X (18K) [USA-10]	B	63.6/26.3
	7030008290	S.RES ERJ2GEJ 183 X (18K) [EXP-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [EUR-11]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [EUR-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [UK-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [FRG-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [HOL-10]		
	7030008290	S.RES ERJ2GEJ 183 X (18K) [AUS-10]		

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R575	7030005120	S.RES ERJ2GEJ 102 X (1K) [USA-10]	B	73.4/22.5
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EXP-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EUR-11]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EUR-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [UK-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [FRG-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [HOL-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [AUS-10]		
R576	7030005050	S.RES ERJ2GEJ 103 X (10K) [USA-10]	B	20.8/27.0
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EXP-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-11]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [UK-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [FRG-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [HOL-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [AUS-10]		
R577	7030005050	S.RES ERJ2GEJ 103 X (10K) [USA-10]	B	20.8/26.1
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EXP-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-11]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [EUR-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [UK-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [FRG-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [HOL-10]		
	7030005050	S.RES ERJ2GEJ 103 X (10K) [AUS-10]		
R578	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	71.6/36.0
R579	7030005090	S.RES ERJ2GEJ 104 X (100K) [USA-10]	B	31.9/22.9
	7030005090	S.RES ERJ2GEJ 104 X (100K) [EXP-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [EUR-11]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [EUR-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [UK-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [FRG-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [HOL-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [AUS-10]		
R580	7030005090	S.RES ERJ2GEJ 104 X (100K) [USA-10]	B	34.3/27.7
	7030005090	S.RES ERJ2GEJ 104 X (100K) [EXP-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [EUR-11]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [EUR-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [UK-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [FRG-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [HOL-10]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [AUS-10]		
R581	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	23.3/36.4
R582	7030009530	S.RES ERJ2GEJ 270 X (27) [USA-10]	B	55.3/17.3
	7030009530	S.RES ERJ2GEJ 270 X (27) [EXP-10]		
	7030009530	S.RES ERJ2GEJ 270 X (27) [EUR-11]		
	7030009530	S.RES ERJ2GEJ 270 X (27) [EUR-10]		
	7030009530	S.RES ERJ2GEJ 270 X (27) [UK-10]		
	7030009530	S.RES ERJ2GEJ 270 X (27) [FRG-10]		
	7030009530	S.RES ERJ2GEJ 270 X (27) [HOL-10]		
	7030009530	S.RES ERJ2GEJ 270 X (27) [AUS-10]		
R583	7030005120	S.RES ERJ2GEJ 102 X (1K) [USA-10]	B	75.0/22.5
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EXP-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EUR-11]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [EUR-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [UK-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [FRG-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [HOL-10]		
	7030005120	S.RES ERJ2GEJ 102 X (1K) [AUS-10]		
C160	4030017780	S.CER C1005 JB 1H 472K-T	B	50.1/28.4
C170	4030017460	S.CER C1005 JB 1H 102K-T	B	51.6/38.3
C171	4030017420	S.CER C1005 CH 1H 470J-T	B	52.9/28.9
C174	4030017460	S.CER C1005 JB 1H 102K-T	B	55.1/29.2
C176	4030017460	S.CER C1005 JB 1H 102K-T	B	55.5/28.0
C177	4030016930	S.CER C1005 JB 1A 104K-T	B	50.4/38.8
C178	4030018890	S.CER C1005 JB 0J 224K-T	B	50.4/37.9
C179	4030017450	S.CER C1005 JB 1H 271K-T	B	53.7/37.9
C180	4030017450	S.CER C1005 JB 1H 271K-T	B	54.9/37.5
C181	4030016930	S.CER C1005 JB 1A 104K-T	B	52.5/37.5
C190	4030016930	S.CER C1005 JB 1A 104K-T	B	55.5/31.8
C191	4030016930	S.CER C1005 JB 1A 104K-T	B	55.8/33.8
C192	4030019560	S.CER GRM21BB31C106KE15L	B	51.0/4.6
C193	4030016790	S.CER C1005 JB 1E 103K-T	B	49.4/7.2
C194	4030016790	S.CER C1005 JB 1E 103K-T	B	54.8/11.3
C195	4030016790	S.CER C1005 JB 1E 103K-T	B	57.2/11.3
C200	4030016790	S.CER C1005 JB 1E 103K-T	B	25.0/33.5
C202	4030016930	S.CER C1005 JB 1A 104K-T	B	34.2/29.2
C205	4030016960	S.CER C1005 JB 1E 183K-T	B	22.6/32.2
C206	4030017460	S.CER C1005 JB 1H 102K-T	B	22.6/30.4
C207	4030016930	S.CER C1005 JB 1A 104K-T	B	23.8/30.2
C222	4030016790	S.CER C1005 JB 1E 103K-T	B	52.9/18.3
C224	4030019560	S.CER GRM21BB31C106KE15L	B	57.2/12.7
C225	4030018860	S.CER C1005 JB 0J 105K-T	B	57.9/17.6
C228	4030017460	S.CER C1005 JB 1H 102K-T	B	63.6/4.4
C229	4030017460	S.CER C1005 JB 1H 102K-T	B	63.3/8.8
C230	4030019990	S.CER C1005 JB 1C 104K-T	B	61.6/4.4
C231	4030018860	S.CER C1005 JB 0J 105K-T	B	55.3/4.4
C240	4030017460	S.CER C1005 JB 1H 102K-T	B	58.3/8.6
C251	4030019560	S.CER GRM21BB31C106KE15L	B	13.1/40.0
C252	4030017460	S.CER C1005 JB 1H 102K-T	B	10.5/38.1
C254	4030018890	S.CER C1005 JB 0J 224K-T	B	22.6/34.6
C257	4030016930	S.CER C1005 JB 1A 104K-T	B	23.8/33.4
C258	4030017510	S.CER C1005 CH 1H 680J-T	B	29.6/36.8
C260	4030018910	S.CER C1608 JB 0J 475K-T	B	9.0/34.8
C261	4030018860	S.CER C1005 JB 0J 105K-T	B	35.9/26.8
C263	4030016790	S.CER C1005 JB 1E 103K-T	B	31.8/16.0
C264	4030018920	S.CER C1005 JB 1H 392K-T	B	33.6/15.4
C265	4030017680	S.CER C1005 CH 1H 820J-T	B	36.2/16.0
C266	4030016950	S.CER C1005 JB 1A 473K-T	B	36.9/18.7
C267	4030018890	S.CER C1005 JB 0J 224K-T	B	36.9/19.6
C280	4030018860	S.CER C1005 JB 0J 105K-T	B	18.3/6.3
C282	4030019560	S.CER GRM21BB31C106KE15L	B	32.6/4.1
C283	4030016930	S.CER C1005 JB 1A 104K-T	B	8.2/7.0
C285	4030016930	S.CER C1005 JB 1A 104K-T	B	17.3/1.9

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C286	4550007520	S.TAN F931A106MAABMA	B	32.9/12.7
C287	4030017700	S.CER C1005 CH 1H 151J-T	B	35.9/7.8
C288	4030016950	S.CER C1005 JB 1A 473K-T	B	36.4/6.6
C289	4520000020	S.NIO NOJC227M006RWJV	B	74.0/31.0
C340	4030016790	S.CER C1005 JB 1E 103K-T	B	64.6/33.6
C341	4030017920	S.CER C1005 JB 1A 683K-T	B	75.8/35.3
C351	4030016790	S.CER C1005 JB 1E 103K-T	B	76.7/35.3
C377	4030017740	S.CER C1005 JB 1H 821K-T	B	29.8/29.9
C378	4030017780	S.CER C1005 JB 1H 472K-T	B	25.8/30.5
C379	4030017500	S.CER C1005 CH 1H 560J-T	B	28.6/30.3
C401	4030018860	S.CER C1005 JB 0J 105K-T	B	27.8/9.3
C403	4030019560	S.CER GRM21BB31C106KE15L	B	14.3/3.2
C404	4030016790	S.CER C1005 JB 1E 103K-T	B	12.7/6.9
C405	4030016930	S.CER C1005 JB 1A 104K-T	B	5.0/4.1
C430	4030018860	S.CER C1005 JB 0J 105K-T	B	13.7/36.8
C431	4030018860	S.CER C1005 JB 0J 105K-T	B	14.8/39.9
C432	4030016930	S.CER C1005 JB 1A 104K-T	B	9.8/36.8
C433	4030017460	S.CER C1005 JB 1H 102K-T	B	14.8/33.7
C434	4030016960	S.CER C1005 JB 1E 183K-T	B	12.9/29.1
C435	4030016960	S.CER C1005 JB 1E 183K-T	B	14.1/29.0
C436	4030017730	S.CER C1005 JB 1H 471K-T	B	15.8/29.0
C437	4030017460	S.CER C1005 JB 1H 102K-T	B	21.0/28.8
C438	4030016930	S.CER C1005 JB 1A 104K-T	B	14.6/36.8
C439	4030016930	S.CER C1005 JB 1A 104K-T	B	19.3/29.2
C440	4030018910	S.CER C1608 JB 0J 475K-T	B	34.4/38.5
C450	4030016790	S.CER C1005 JB 1E 103K-T	B	34.5/32.8
C482	4030018070	S.CER C1005 CH 1H 300J-T	B	76.7/22.5
C483	4030017400	S.CER C1005 CH 1H 220J-T	B	80.0/22.5
C488	4550007520	S.TAN F931A106MAABMA	B	66.4/3.6
C489	4030016790	S.CER C1005 JB 1E 103K-T	B	64.2/2.3
C491	4030016950	S.CER C1005 JB 1A 473K-T	B	84.8/20.9
C492	4030017460	S.CER C1005 JB 1H 102K-T	B	83.0/20.9
C493	4030016950	S.CER C1005 JB 1A 473K-T	B	81.7/21.0
C494	4030016950	S.CER C1005 JB 1A 473K-T	B	83.1/19.4
C496	4030016950	S.CER C1005 JB 1A 473K-T	B	84.3/18.6
C497	4030016950	S.CER C1005 JB 1A 473K-T	B	84.6/17.4
C498	4030016950	S.CER C1005 JB 1A 473K-T	B	83.8/16.5
C500	4030016930	S.CER C1005 JB 1A 104K-T	B	63.3/2.3
C502	4030018900	S.CER C1005 JB 0J 474K-T	B	84.1/14.0
C503	4030018900	S.CER C1005 JB 0J 474K-T	B	83.9/13.1
C504	4030018900	S.CER C1005 JB 0J 474K-T	B	83.8/11.2
C505	4030018900	S.CER C1005 JB 0J 474K-T	B	84.2/15.4
C510	4030016930	S.CER C1005 JB 1A 104K-T	B	34.4/35.6
C511	4030016930	S.CER C1005 JB 1A 104K-T	B	31.7/38.0
C520	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	29.5/19.4
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C521	4030017770	S.CER C1005 JB 1H 332K-T [USA-10]	B	26.9/21.9
	4030017770	S.CER C1005 JB 1H 332K-T [EXP-10]		
	4030017770	S.CER C1005 JB 1H 332K-T [EUR-11]		
	4030017770	S.CER C1005 JB 1H 332K-T [EUR-10]		
	4030017770	S.CER C1005 JB 1H 332K-T [UK-10]		
	4030017770	S.CER C1005 JB 1H 332K-T [FRG-10]		
	4030017770	S.CER C1005 JB 1H 332K-T [HOL-10]		
	4030017770	S.CER C1005 JB 1H 332K-T [AUS-10]		
C522	4030017040	S.CER C1005 JB 1A 333K-T [USA-10]	B	27.1/23.1
	4030017040	S.CER C1005 JB 1A 333K-T [EXP-10]		
	4030017040	S.CER C1005 JB 1A 333K-T [EUR-11]		
	4030017040	S.CER C1005 JB 1A 333K-T [EUR-10]		
	4030017040	S.CER C1005 JB 1A 333K-T [UK-10]		
	4030017040	S.CER C1005 JB 1A 333K-T [FRG-10]		
	4030017040	S.CER C1005 JB 1A 333K-T [HOL-10]		
	4030017040	S.CER C1005 JB 1A 333K-T [AUS-10]		
C523	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	23.8/24.2
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C524	4030019560	S.CER GRM21BB31C106KE15L [USA-10]	B	30.0/14.5
	4030019560	S.CER GRM21BB31C106KE15L [EXP-10]		
	4030019560	S.CER GRM21BB31C106KE15L [EUR-11]		
	4030019560	S.CER GRM21BB31C106KE15L [EUR-10]		
	4030019560	S.CER GRM21BB31C106KE15L [UK-10]		
	4030019560	S.CER GRM21BB31C106KE15L [FRG-10]		
	4030019560	S.CER GRM21BB31C106KE15L [HOL-10]		
	4030019560	S.CER GRM21BB31C106KE15L [AUS-10]		
C525	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	25.6/24.2
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C526	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	24.7/24.2
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C527	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	13.9/19.4
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C528	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	13.9/18.5
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C529	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	29.3/15.9
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C530	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	27.4/11.6
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C531	4030019560	S.CER GRM21BB31C106KE15L[USA-10]	B	12.8/13.1
	4030019560	S.CER GRM21BB31C106KE15L[EXP-10]		
	4030019560	S.CER GRM21BB31C106KE15L[EUR-11]		
	4030019560	S.CER GRM21BB31C106KE15L[EUR-10]		
	4030019560	S.CER GRM21BB31C106KE15L [UK-10]		
	4030019560	S.CER GRM21BB31C106KE15L[FRG-10]		
	4030019560	S.CER GRM21BB31C106KE15L[HOL-10]		
	4030019560	S.CER GRM21BB31C106KE15L[AUS-10]		
C532	4030018900	S.CER C1005 JB 0J 474K-T [USA-10]	B	19.1/9.0
	4030018900	S.CER C1005 JB 0J 474K-T [EXP-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [EUR-11]		
	4030018900	S.CER C1005 JB 0J 474K-T [EUR-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [UK-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [FRG-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [HOL-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [AUS-10]		
C533	4030018900	S.CER C1005 JB 0J 474K-T [USA-10]	B	18.2/9.0
	4030018900	S.CER C1005 JB 0J 474K-T [EXP-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [EUR-11]		
	4030018900	S.CER C1005 JB 0J 474K-T [EUR-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [UK-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [FRG-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [HOL-10]		
	4030018900	S.CER C1005 JB 0J 474K-T [AUS-10]		
C534	4030018860	S.CER C1005 JB 0J 105K-T [USA-10]	B	13.9/14.5
	4030018860	S.CER C1005 JB 0J 105K-T [EXP-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-11]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [UK-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [FRG-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [HOL-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [AUS-10]		
C535	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	20.0/9.0
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C536	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	13.7/15.4
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C537	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	13.6/11.7
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C538	4030018860	S.CER C1005 JB 0J 105K-T [USA-10]	B	25.7/25.8
	4030018860	S.CER C1005 JB 0J 105K-T [EXP-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-11]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [UK-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [FRG-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [HOL-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [AUS-10]		

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C539	4030018860	S.CER C1005 JB 0J 105K-T [USA-10]	B	25.7/27.4
	4030018860	S.CER C1005 JB 0J 105K-T [EXP-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-11]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [UK-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [FRG-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [HOL-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [AUS-10]		
C540	4030018860	S.CER C1005 JB 0J 105K-T [USA-10]	B	30.1/26.3
	4030018860	S.CER C1005 JB 0J 105K-T [EXP-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-11]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [UK-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [FRG-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [HOL-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [AUS-10]		
C541	4030018860	S.CER C1005 JB 0J 105K-T [USA-10]	B	30.1/27.9
	4030018860	S.CER C1005 JB 0J 105K-T [EXP-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-11]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [UK-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [FRG-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [HOL-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [AUS-10]		
C552	4030016930	S.CER C1005 JB 1A 104K-T	B	31.9/21.3
C554	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	13.0/22.8
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
C556	4030017420	S.CER C1005 CH 1H 470J-T	B	57.5/21.0
C557	4030019560	S.CER GRM21BB31C106KE15L[USA-10]	B	56.6/19.0
	4030019560	S.CER GRM21BB31C106KE15L[EXP-10]		
	4030019560	S.CER GRM21BB31C106KE15L[EUR-11]		
	4030019560	S.CER GRM21BB31C106KE15L[EUR-10]		
	4030019560	S.CER GRM21BB31C106KE15L [UK-10]		
	4030019560	S.CER GRM21BB31C106KE15L[FRG-10]		
	4030019560	S.CER GRM21BB31C106KE15L[HOL-10]		
	4030019560	S.CER GRM21BB31C106KE15L[AUS-10]		
C558	4030018860	S.CER C1005 JB 0J 105K-T [USA-10]	B	34.3/26.5
	4030018860	S.CER C1005 JB 0J 105K-T [EXP-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-11]		
	4030018860	S.CER C1005 JB 0J 105K-T [EUR-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [UK-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [FRG-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [HOL-10]		
	4030018860	S.CER C1005 JB 0J 105K-T [AUS-10]		
C560	4030016930	S.CER C1005 JB 1A 104K-T [USA-10]	B	64.5/28.2
	4030016930	S.CER C1005 JB 1A 104K-T [EXP-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-11]		
	4030016930	S.CER C1005 JB 1A 104K-T [EUR-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [UK-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [FRG-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [HOL-10]		
	4030016930	S.CER C1005 JB 1A 104K-T [AUS-10]		
J100	6510025130	S.CON 30P9.0-JMCS-G-B-TF(N)	B	61.3/20.4
J251	6510021901	S.CON BM02B-ASRS-TF(LF)(SN)	T	6.6/3.0
J300	6510022692	S.CON 06FLT-SM2-TB(LF)(SN)(M)	B	67.3/29.9
J301	6510022692	S.CON 06FLT-SM2-TB(LF)(SN)(M)	B	74.2/39.5
DS240	5040003011	S.LED SML-A12WT T86J	T	63.4/1.1
DS241	5040003011	S.LED SML-A12WT T86J	T	73.6/1.1
DS242	5040003510	S.LED LNJ426W83RA	T	38.6/10.4
DS243	5040003510	S.LED LNJ426W83RA	T	38.6/32.3
DS250	5040003011	S.LED SML-A12WT T86J	T	63.4/41.5
DS251	5040003011	S.LED SML-A12WT T86J	T	73.6/41.5
DS252	5040003510	S.LED LNJ426W83RA	T	25.2/10.5
DS253	5040003510	S.LED LNJ426W83RA	T	25.2/32.2
DS480	5030003670	LCD L2-1365TVF <TES>		
MC250	7700002990	MIC EM6027P-46C10&33-G <HOR>		
S1	2260003300	S.SWI EVQPQHB55	T	45.1/31.8
S2	2260003300	S.SWI EVQPQHB55	T	32.4/33.0
S3	2260003300	S.SWI EVQPQHB55	T	17.7/31.6
S4	2260003300	S.SWI EVQPQHB55	T	36.5/21.3
S5	2260003300	S.SWI EVQPQHB55	T	26.2/21.3
S6	2260003300	S.SWI EVQPQHB55	T	45.1/10.8
S7	2260003300	S.SWI EVQPQHB55	T	32.4/9.6
S8	2260003300	S.SWI EVQPQHB55	T	17.7/11.0
EP360	8930087800	LCD SRCN-3495-SP-N-W (SHJ)		

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[RF UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
IC1	1130016080	S.IC	GP214D <SEI>	T	7.3/35.3
IC2	1180003980	S.REG	XC6221A332MR-G	T	12.3/29.4
IC50	1120002830	S.IC	NJM2125F-TE1-#FZZB	T	22.4/22.3
Q3	1560000541	S.FET	2SK880-Y(T5RICOMF)	T	17.8/30.4
Q20	1590004070	S.TRA	LDTC144EET1G <SLVJ>	B	17.4/31.4
Q21	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	B	16.9/27.3
Q22	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	B	20.5/25.2
Q23	1530002381	S.TRA	2SC4215-Y(TE85LF)	B	12.8/30.0
Q24	1530002381	S.TRA	2SC4215-Y(TE85LF)	B	11.0/25.3
Q25	1530002381	S.TRA	2SC4215-Y(TE85LF)	B	11.2/33.9
Q50	1530004011	S.TRA	KTC3770U-C-RTK/P	T	3.9/2.8
Q53	1560001550	S.FET	RD01MUS2-T113	T	8.2/8.3
Q54	1560001700	S.FET	RD07MUS2B-T112	T	18.0/7.8
Q90	1580000751	S.FET	3SK294(TE85LF)	B	19.2/15.7
Q100	1590004070	S.TRA	LDTC144EET1G <SLVJ>	T	19.6/23.3
Q150	1580000731	S.FET	3SK293(TE85LF)	B	9.9/17.4
Q151	1530002601	S.TRA	2SC4215-O(TE85RF)	B	7.3/28.5
Q222	1510001151	S.TRA	L2SA1576AST1G <SLVJ>	T	28.8/16.8
Q351	1590004050	S.TRA	LDTA144EET1G <SLVJ>	T	27.3/19.4
Q480	1550000090	S.FET	RSQ035P03TR	B	3.6/3.4
D1	1750000771	S.VAR	HVC376BTRF-E	B	2.2/39.8
D3	1750001810	S.DIO	L1SS400T1G <SLVJ>	T	6.8/31.3
D20	1750001700	S.DIO	HSC277TRF-E	B	18.5/35.0
D21	1750001700	S.DIO	HSC277TRF-E	B	16.6/34.5
D22	1750001780	S.VAR	HVB350BYPTL-E	B	21.4/28.7
D50	1750002780	S.DIO	RN142GT2R	T	6.9/17.2
D51	1750002780	S.DIO	RN142GT2R	T	7.4/19.5
D52	1750000581	S.DIO	1SV307(TPH3F)	T	27.1/6.5
D90	1750002780	S.DIO	RN142GT2R	B	26.9/7.3
D91	1790001670	S.DIO	RB706F-40T106	T	24.6/10.5
D92	1750002300	S.VAR	KDV214EA-RTK/P	B	26.0/20.1
D93	1750002300	S.VAR	KDV214EA-RTK/P	B	23.0/20.0
D130	1750002300	S.VAR	KDV214EA-RTK/P	B	15.8/17.1
D131	1750002300	S.VAR	KDV214EA-RTK/P	B	14.3/18.9
D353	1750002170	S.DIO	DB2S31400L	B	27.0/8.4
D354	1790001860	S.VAR	EZJZ0V80010	T	18.0/14.6
FI150	2030000350	MON	21R15AB (FL-368)		
FI151	2030000270	MON	MCF21R15AB 21.7 MHz (FL-363)		
X1	6050011740	S.XTA	CR-766 TSS-6035B 21.250 MHz	B	6.2/36.9
L1	6200008070	S.COI	MLF1608E 6R8K 6.8U	T	7.1/29.0
L20	6200011021	S.COI	ELJRF 82NJFB	B	11.4/36.5
L21	6200003711	S.COI	NLV25T-2R7J	B	21.9/35.8
L22	6200011410	S.COI	C2520C-82NG-A	B	20.7/31.6
L23	6200011031	S.COI	ELJRF R10JFB	B	12.8/31.7
L24	6200011031	S.COI	ELJRF R10JFB	B	11.9/27.8
L25	6200011031	S.COI	ELJRF R10JFB	B	13.1/33.8
L26	6200009151	S.COI	ELJRE 82NJFA	T	7.7/14.8
L50	6200011031	S.COI	ELJRF R10JFB	T	5.6/3.6
L51	6200011021	S.COI	ELJRF 82NJFB	T	7.0/4.6
L53	6200007690	S.COI	LQW2BHN18NJ03L	T	11.2/12.5
L55	6200012750	S.COI	0.20-1.0-7TL 25N <COMO>	T	20.6/12.6
L56	6200012570	S.COI	0.26-1.0-3TL 6.8N <COMO>	T	19.9/2.6
L57	6200012680	S.COI	0.30-1.3-5TL 20N <COMO>	T	23.4/2.4
L58	6200003711	S.COI	NLV25T-2R7J	T	28.0/10.6
L80	6200012470	S.COI	0.30-1.7-7TL 45.3N <COMO>	T	23.8/7.9
L81	6200012770	S.COI	0.26-1.1-7TR 24N <COMO>	B	29.4/5.4
L82	6200012780	S.COI	0.30-1.4-6TL 27.2N <COMO>	B	32.6/5.3
L90	6200012470	S.COI	0.30-1.7-7TL 45.3N <COMO>	B	24.2/6.8
L92	6200007750	S.COI	LQW2BHN56NJ03L	B	28.6/11.8
L93	6200007750	S.COI	LQW2BHN56NJ03L	B	25.1/17.3
L96	6200007750	S.COI	LQW2BHN56NJ03L	B	17.5/18.5
L97	6200007750	S.COI	LQW2BHN56NJ03L	B	13.7/14.5
L98	6200003680	S.COI	LQH31MNR82M03L	B	8.6/19.9
R1	7510001661	S.THR	NTCG16 4LH 473JT	B	6.1/32.0
R2	7030012480	S.RES	ERJ2RKF 1003X (100K)	B	6.4/30.9
R4	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	3.7/36.7
R5	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	8.8/40.5
R6	7030005120	S.RES	ERJ2GEJ 102 X (1K)	B	17.2/36.7
R7	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	18.9/33.9
R8	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	9.7/29.2
R10	7030008370	S.RES	ERJ2GEJ 561 X (560)	T	13.7/35.7
R11	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	15.2/30.9
R12	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	16.7/32.7
R13	7030005210	S.RES	ERJ2GEJ 822 X (8.2K)	T	17.6/28.2
R20	7030004980	S.RES	ERJ2GEJ 101 X (100)	B	12.7/35.4
R22	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	T	15.8/36.2
R23	7030005120	S.RES	ERJ2GEJ 102 X (1K)	B	20.2/34.1
R24	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	15.3/33.9
R25	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	15.2/34.8
R26	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	17.7/29.0
R27	7030008010	S.RES	ERJ2GEJ 123 X (12K)	B	19.3/27.0
R28	7030004990	S.RES	ERJ2GEJ 221 X (220)	B	17.7/25.5
R29	7030005000	S.RES	ERJ2GEJ 471 X (470)	B	14.6/27.4
R30	7030005070	S.RES	ERJ2GEJ 683 X (68K)	B	15.6/30.4
R31	7030005010	S.RES	ERJ2GEJ 681 X (680)	B	14.0/31.9
R32	7030008280	S.RES	ERJ2GEJ 271 X (270)	B	13.1/28.2
R33	7030007350	S.RES	ERJ2GEJ 393 X (39K)	B	10.7/27.9
R34	7030007280	S.RES	ERJ2GEJ 331 X (330)	B	12.8/32.6
R35	7030005070	S.RES	ERJ2GEJ 683 X (68K)	B	10.9/32.1
R36	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	17.1/26.0
R40	7030010040	S.RES	ERJ2GEJ-JPW	B	22.5/26.3
R50	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	8.0/25.7
R52	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	T	4.6/11.0

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

[RF UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
R53	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	5.8/10.6
R54	7030005530	S.RES	ERJ2GEJ 100 X (10)	T	5.5/6.0
R55	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	T	5.2/4.8
R56	7030007570	S.RES	ERJ2GEJ 122 X (1.2K)	T	4.2/7.2
R57	7030005570	S.RES	ERJ2GEJ 820 X (82)	T	2.1/1.8
R65	7030005100	S.RES	ERJ2GEJ 154 X (150K)	T	19.3/18.7
R66	7030005240	S.RES	ERJ2GEJ 473 X (47K)	T	20.7/19.2
R67	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	25.5/22.1
R68	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	25.5/23.7
R69	7030007340	S.RES	ERJ2GEJ 153 X (15K)	T	9.6/3.1
R70	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	9.6/4.7
R71	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	8.4/4.4
R72	7030004970	S.RES	ERJ2GEJ 470 X (47)	T	11.9/14.0
R73	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	12.2/2.5
R74	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	13.4/2.6
R75	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	14.1/4.4
R76	7030000280	S.RES	MCR10EZHJ 150 (151)	T	28.9/14.0
R80	7030005080	S.RES	ERJ2GEJ 823 X (82K)	T	29.6/7.9
R81	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	20.7/18.3
R91	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	27.4/20.1
R93	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	28.3/19.2
R94	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	21.9/21.1
R95	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	21.5/17.4
R96	7030005700	S.RES	ERJ2GEJ 274 X (270K)	B	21.9/16.2
R97	7030004990	S.RES	ERJ2GEJ 221 X (220)	B	19.3/19.3
R103	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	21.0/16.2
R104	7030005030	S.RES	ERJ2GEJ 152 X (1.5K)	B	16.2/15.0
R105	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	16.1/20.3
R107	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	15.2/20.3
R109	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	9.1/21.7
R110	7030008400	S.RES	ERJ2GEJ 182 X (1.8K)	B	7.2/15.5
R111	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	11.7/15.6
R113	7030004980	S.RES	ERJ2GEJ 101 X (100)	B	17.6/21.0
R115	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	8.8/15.4
R120	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	T	7.7/20.4
R121	7030007350	S.RES	ERJ2GEJ 393 X (39K)	B	9.2/14.2
R122	7030005230	S.RES	ERJ2GEJ 334 X (330K)	B	10.1/14.2
R152	7030009270	S.RES	ERJ2GEJ 821 X (820)	B	2.7/12.2
R153	7030005120	S.RES	ERJ2GEJ 102 X (1K)	B	2.3/28.5
R154	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	5.5/29.1
R155	7030005030	S.RES	ERJ2GEJ 152 X (1.5K)	B	6.9/25.3
R156	7030005000	S.RES	ERJ2GEJ 471 X (470)	B	7.4/26.5
R224	7030005240	S.RES	ERJ2GEJ 473 X (47K)	T	26.9/17.1
R225	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	21.2/16.8
R230	7030005060	S.RES	ERJ2GEJ 333 X (33K)	T	20.2/21.3
R380	7030008010	S.RES	ERJ2GEJ 123 X (12K)	T	22.6/10.3
R381	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	24.4/20.5
R382	7030009140	S.RES	ERJ2GEJ 272 X (2.7K)	T	22.8/18.7
R383	7030008010	S.RES	ERJ2GEJ 123 X (12K)	T	23.2/20.1
R384	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	T	25.6/20.9
R386	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	24.5/18.7
R510	7030005700	S.RES	ERJ2GEJ 274 X (270K)	B	3.8/6.5
R511	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	3.4/7.8
C2	4030017460	S.CER	C1005 JB 1H 102K-T	B	3.8/31.4
C3	4030017690	S.CER	C1005 CH 1H 121J-T	B	3.2/38.2
C4	4030017390	S.CER	C1005 CH 1H 180J-T	B	3.2/39.4
C5	4030017670	S.CER	C1005 CH 1H 390J-T	B	9.7/40.5
C6	4030017460	S.CER	C1005 JB 1H 102K-T	B	18.4/36.4
C7	4030016790	S.CER	C1005 JB 1E 103K-T	T	13.3/31.6
C9	4030017630	S.CER	C1005 CH 1H 120J-T	T	8.8/28.3
C11	4550007480	S.TAN	F930J106MAABMA	T	17.7/34.5
C12	4030018860	S.CER	C1005 JB 0J 105K-T	T	4.2/29.1
C13	4030016930	S.CER	C1005 JB 1A 104K-T	T	14.6/35.7
C15	4030017460	S.CER	C1005 JB 1H 102K-T	T	14.8/30.0
C18	4030016930	S.CER	C1005 JB 1A 104K-T	T	12.8/35.7
C19	4030017650	S.CER	C1005 CH 1H 270J-T	B	9.2/39.3
C20	4030017460	S.CER	C1005 JB 1H 102K-T	B	13.5/36.6
C21	4030017610	S.CER	C1005 CH 1H 090C-T	B	12.6/36.6
C22	4030017610	S.CER	C1005 CH 1H 090C-T	B	10.2/36.8
C24	4550008150	S.TAN	F921V224MAA	T	20.3/36.8
C25	4030017460	S.CER	C1005 JB 1H 102K-T	B	20.2/36.7
C26	4030018010	S.CER	C1005 CH 1H 360J-T	B	21.6/33.7
C27	4030017670	S.CER	C1005 CH 1H 390J-T	B	19.3/36.4
C28	4030017460	S.CER	C1005 JB 1H 102K-T	B	15.3/36.6
C29	4030017460	S.CER	C1005 JB 1H 102K-T	B	17.5/32.8
C30	4030017460	S.CER	C1005 JB 1H 102K-T	B	15.3/35.7
C31	4030017460	S.CER	C1005 JB 1H 102K-T	B	14.6/26.5
C32	4030017350	S.CER	C1005 CH 1H 020B-T	B	18.1/29.9
C33	4030017440	S.CER	C1005 CH 1H 221J-T	B	18.9/28.3
C34	4030017550	S.CER	C1005 CH 1H 1R5B-T	B	21.2/27.0
C35	4030017460	S.CER	C1005 JB 1H 102K-T	B	17.7/24.6
C36	4030017460	S.CER	C1005 JB 1H 102K-T	B	14.7/30.4
C37	4030017340	S.CER	C1005 CH 1H 010B-T	B	16.0/29.0
C38	4030017460	S.CER	C1005 JB 1H 102K-T	B	10.7/27.0
C39	4030017580	S.CER	C1005 CH 1H 060C-T	B	10.7/28.8
C40	4030017640	S.CER	C1005 CH 1H 150J-T	B	12.7/26.6
C41	4030017460	S.CER	C1005 JB 1H 102K-T	B	10.7/31.2
C42	4030017360	S.CER	C1005 CH 1H 030B-T	B	10.8/30.0
C43	4030017400	S.CER	C1005 CH 1H 220J-T	B	10.7/35.6
C44	4030017460	S.CER	C1005 JB 1H 102K-T	T	15.9/29.1
C46	4030018890	S.CER	C1005 JB 0J 224K-T	T	16.0/27.3
C50	4030017460	S.CER	C1005 JB 1H 102K-T	T	6.2/11.8
C51	4030017400	S.CER	C1005 CH 1H 220J-T	T	5.1/8.4
C52	4030017460	S.CER	C1005 JB 1H 102K-T	T	4.3/6.3
C53	4030017460	S.CER	C1005 JB 1H 102K-T	T	2.1/3.5
C54	4030017640	S.CER	C1005 CH 1H 150J-T	T	6.8/3.3
C55	4030017410	S.CER	C1005 CH 1H 240J-T	T	8.4/3.3
C56	4030016790	S.CER	C1005 JB 1E 103K-T	T	20.7/20.1
C57	4030016930	S.CER	C1005 JB 1A 104K-T	T	21.0/24.9
C58	4030016930	S.CER	C1005 JB 1A 104K-T	T	24.6/22.1
C59	4030017730	S.CER	C1005 JB 1H 471K-T	T	24.6/23.7
C60	4030017460	S.CER	C1005 JB 1H 102K-T	T	24.6/25.3
C61	4030019560	S.CER	GRM21BB31C106KE15L	T	18.5/16.1

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[RF UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C62	4030017460	S.CER C1005 JB 1H 102K-T	T	16.6/13.8
C63	4030016790	S.CER C1005 JB 1E 103K-T	T	14.1/13.7
C64	4030017460	S.CER C1005 JB 1H 102K-T	T	11.4/3.8
C65	4030017430	S.CER C1005 CH 1H 101J-T	T	12.3/5.1
C66	4030017460	S.CER C1005 JB 1H 102K-T	T	14.3/2.6
C67	4030017730	S.CER C1005 JB 1H 471K-T	T	18.7/12.2
C68	4030017420	S.CER C1005 CH 1H 470J-T	T	22.1/13.1
C69	4030017460	S.CER C1005 JB 1H 102K-T	T	13.2/13.7
C70	4030007100	S.CER C1608 CH 1H 560J-T	T	21.5/1.7
C71	4030007060	S.CER C1608 CH 1H 270J-T	T	25.9/3.8
C72	4030006860	S.CER C1608 JB 1H 102K-T	T	23.2/5.2
C73	4030017460	S.CER C1005 JB 1H 102K-T	T	29.8/11.6
C74	4030017460	S.CER C1005 JB 1H 102K-T	T	26.6/8.6
C77	4030016930	S.CER C1005 JB 1A 104K-T	T	10.5/3.8
C78	4030016930	S.CER C1005 JB 1A 104K-T	T	12.9/3.8
C80	4030017460	S.CER C1005 JB 1H 102K-T	T	28.5/4.8
C81	4030017390	S.CER C1005 CH 1H 180J-T	T	24.8/5.1
C82	4030017390	S.CER C1005 CH 1H 180J-T	T	25.0/6.0
C83	4030017400	S.CER C1005 CH 1H 220J-T	T	28.8/6.5
C84	4030018120	S.CER C1005 CH 1H 110J-T	T	30.1/4.3
C85	4030017410	S.CER C1005 CH 1H 240J-T	T	29.7/5.6
C86	4030017610	S.CER C1005 CH 1H 090C-T	T	30.4/9.4
C89	4030017590	S.CER C1005 CH 1H 070C-T	T	32.2/4.3
C90	4030017610	S.CER C1005 CH 1H 090C-T	B	23.4/4.0
C91	4030017620	S.CER C1005 CH 1H 100C-T	B	26.6/6.2
C94	4030017380	S.CER C1005 CH 1H 050B-T	B	26.7/10.4
C95	4030017640	S.CER C1005 CH 1H 150J-T	B	24.9/20.5
C96	4030017460	S.CER C1005 JB 1H 102K-T	B	21.0/21.1
C97	4030017550	S.CER C1005 CH 1H 1R5B-T	B	29.3/14.2
C98	4030017550	S.CER C1005 CH 1H 1R5B-T [USA]	B	24.4/19.2
	4030017550	S.CER C1005 CH 1H 1R5B-T [EXP]		
	4030017340	S.CER C1005 CH 1H 010B-T [EUR-01]		
	4030017340	S.CER C1005 CH 1H 010B-T [EUR]		
	4030017340	S.CER C1005 CH 1H 010B-T [UK]		
	4030017340	S.CER C1005 CH 1H 010B-T [FRG]		
	4030017340	S.CER C1005 CH 1H 010B-T [HOL]		
	4030017550	S.CER C1005 CH 1H 1R5B-T [AUS]		
	4030017550	S.CER C1005 CH 1H 1R5B-T [USA-10]		
	4030017550	S.CER C1005 CH 1H 1R5B-T [EXP-10]		
	4030017340	S.CER C1005 CH 1H 010B-T [EUR-11]		
	4030017340	S.CER C1005 CH 1H 010B-T [EUR-10]		
	4030017340	S.CER C1005 CH 1H 010B-T [UK-10]		
	4030017340	S.CER C1005 CH 1H 010B-T [FRG-10]		
	4030017340	S.CER C1005 CH 1H 010B-T [HOL-10]		
	4030017550	S.CER C1005 CH 1H 1R5B-T [AUS-10]		
C99	4030017660	S.CER C1005 CH 1H 330J-T	B	24.0/20.5
C100	4030017560	S.CER C1005 CH 1H 2R5B-T	B	23.0/17.1
C101	4030017640	S.CER C1005 CH 1H 150J-T [USA]	B	22.4/18.3
	4030017640	S.CER C1005 CH 1H 150J-T [EXP]		
	4030017620	S.CER C1005 CH 1H 100C-T [EUR-01]		
	4030017620	S.CER C1005 CH 1H 100C-T [EUR]		
	4030017620	S.CER C1005 CH 1H 100C-T [UK]		
	4030017620	S.CER C1005 CH 1H 100C-T [FRG]		
	4030017620	S.CER C1005 CH 1H 100C-T [HOL]		
	4030017640	S.CER C1005 CH 1H 150J-T [AUS]		
	4030017640	S.CER C1005 CH 1H 150J-T [USA-10]		
	4030017640	S.CER C1005 CH 1H 150J-T [EXP-10]		
	4030017620	S.CER C1005 CH 1H 100C-T [EUR-11]		
	4030017620	S.CER C1005 CH 1H 100C-T [EUR-10]		
	4030017620	S.CER C1005 CH 1H 100C-T [UK-10]		
	4030017620	S.CER C1005 CH 1H 100C-T [FRG-10]		
	4030017620	S.CER C1005 CH 1H 100C-T [HOL-10]		
	4030017640	S.CER C1005 CH 1H 150J-T [AUS-10]		
C102	4030016790	S.CER C1005 JB 1E 103K-T	B	19.3/17.5
C103	4030017420	S.CER C1005 CH 1H 470J-T	B	19.3/18.4
C104	4030016790	S.CER C1005 JB 1E 103K-T	B	20.5/18.6
C109	4030017460	S.CER C1005 JB 1H 102K-T	B	17.0/15.9
C110	4030017670	S.CER C1005 CH 1H 390J-T	B	15.7/19.1
C111	4030017460	S.CER C1005 JB 1H 102K-T	B	15.7/21.5
C112	4030017560	S.CER C1005 CH 1H 2R5B-T	B	16.2/14.1
C113	4030017540	S.CER C1005 CH 1H R75B-T	B	14.5/16.0
C114	4030017650	S.CER C1005 CH 1H 270J-T	B	14.0/20.6
C115	4030017380	S.CER C1005 CH 1H 050B-T	B	14.0/17.2
C116	4030017350	S.CER C1005 CH 1H 020B-T	B	12.9/16.0
C119	4030017500	S.CER C1005 CH 1H 560J-T	B	7.3/17.6
C120	4030016970	S.CER C1005 JB 1E 223K-T	B	8.2/17.5
C121	4030017460	S.CER C1005 JB 1H 102K-T	B	7.2/16.4
C122	4030016790	S.CER C1005 JB 1E 103K-T	T	8.0/17.1
C125	4030016930	S.CER C1005 JB 1A 104K-T	T	14.4/27.3
C126	4030018860	S.CER C1005 JB 0J 105K-T	T	14.7/26.4
C131	4030017630	S.CER C1005 CH 1H 120J-T	T	8.0/13.1
C154	4030017460	S.CER C1005 JB 1H 102K-T	B	4.6/11.7
C155	4030017360	S.CER C1005 CH 1H 030B-T	T	3.7/20.8
C156	4030017460	S.CER C1005 JB 1H 102K-T	B	2.5/29.7
C157	4030016970	S.CER C1005 JB 1E 223K-T	B	4.6/29.3
C158	4030017460	S.CER C1005 JB 1H 102K-T	B	3.7/29.3
C159	4030016790	S.CER C1005 JB 1E 103K-T	B	7.9/25.3
C160	4030016780	S.CER C1005 JB 1E 153K-T	B	10.0/21.7
C220	4030019560	S.CER GRM21BB31C106KE15L	T	12.8/33.0
C223	4030016790	S.CER C1005 JB 1E 103K-T	T	22.4/16.4
C225	4030011770	S.CER C1608 CH 1H 060B-T	T	21.5/4.3
C380	4030017460	S.CER C1005 JB 1H 102K-T	T	21.9/18.7
C381	4030017460	S.CER C1005 JB 1H 102K-T	T	25.4/18.7
C400	4030017420	S.CER C1005 CH 1H 470J-T	T	18.0/27.1
C401	4030017420	S.CER C1005 CH 1H 470J-T	T	18.6/25.4
C402	4030017420	S.CER C1005 CH 1H 470J-T	T	8.7/32.0
C510	4030017460	S.CER C1005 JB 1H 102K-T	B	1.5/3.7
C512	4030017460	S.CER C1005 JB 1H 102K-T	B	5.8/1.8
J101	6510025121	S.CON 30RF-JMCS-G-1B-TF(N)(LF)(SN)	T	11.8/20.1
S250	2260002800	S.SWI SW-167 (SKQTLAE010)	T	20.0/39.9
S328	2260002800	S.SWI SW-167 (SKQTLAE010)	T	5.0/39.9

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

[RF UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
EP2	6910014690	S.BEA MPZ1608S221A-T	T	15.4/15.0
EP3	6910014690	S.BEA MPZ1608S221A-T	T	18.3/13.4

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
C700	4030017420	S.CER	C1005 CH 1H 470J-T	B	9.3/5.1
C703	4030017620	S.CER	C1005 CH 1H 100C-T	B	8.0/6.6
J415	6510022692	S.CON	06FLT-SM2-TB(LF)(SN)(M)	B	8.2/2.5
J416	6510021941	CON	246S-550-4P-68(JIS8)		
W470	8910000070	FFC	FFC-1008 (P0.5N6L50) <TJM>		
EP451	6910018460	S.BEA	MMZ1005Y102C-T	B	2.6/2.6
EP452	6910018460	S.BEA	MMZ1005Y102C-T	B	4.5/1.4
EP454	6910018460	S.BEA	MMZ1005Y102C-T	B	4.9/2.7
EP458	6910018460	S.BEA	MMZ1005Y102C-T	B	8.4/7.8

[VR UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
R801	7210003650	VAR	F081-0028A <SLVJ>		
J416	6510029480	S.CON	06FH-SM1-TB(LF)(SN)	B	4.1/2.0
W801	8910000070	FFC	FFC-1008 (P0.5N6L50) <TJM>		

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

SECTION 7 MECHANICAL PARTS

[CHASSIS PARTS]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6910017840	2905 ANT CONNECTOR <EIK>	1
J3	6510025340	2905 CONTACT SPRING <CCP>	1
MP1	8210029010	3495 FRONT PANEL ASS.Y<ITM> [USA]	1
	8210029010	3495 FRONT PANEL ASS.Y<ITM> [EXP]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [EUR-01]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [EUR]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [UK]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [FRG]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [HOL]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [AUS]	1
	8210029010	3495 FRONT PANEL ASS.Y<ITM> [USA-10]	1
	8210029010	3495 FRONT PANEL ASS.Y<ITM> [EXP-10]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [EUR-11]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [EUR-10]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [UK-10]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [FRG-10]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [HOL-10]	1
	8210029020	3495 FRONT PANEL (A) ASS.Y<ITM> [AUS-10]	1
MP5	8930068980	2905 VENT SHEET	1
MP6	8930069940	2905 A-MAIN SEAL (TOP)	1
MP7	8010022660	2905 A-REAR PANEL	1
MP8	8310065560	2905 T-PLATE	1
MP9	8930068501	2905 T-RUBBER-1 (TOP)	1
MP10	8930088090	3495 T-SHEET	1
MP11	8810010450	PH M2X3 SUS SSBC	2
MP12	8930068470	2905 PTT BUTTON (TOP)	1
MP13	8210022480	2905 PTT PANEL	1
MP14	8810010630	PH3 M2X3 SUS SSBC	1
MP15	8310065550	2905 LOCK PLATE	1
MP17	8930069350	2905 MIC SEAL (TOP)	1
MP18	8930051390	2304 SHAFT	1
MP19	8610012900	KNOB N344	1
MP20	8930057690	O-RING (AQ) (TOP)	1
MP21	8830002770	VR NUT (W)	1
MP22	8930053590	O-RING (AG) (TOT)	1
MP23	8830001160	VR NUT (K)	1
MP24	8850002770	PLAIN WASHER (AM)	1
MP26	8830002780	VR NUT (X)	1
MP27	8930050660	2320 CONNECTOR CAP	1
MP28	8810009181	BT M2X5 NI-ZC3	2
MP29	8810010480	PHB0 M2X6 SUS SSBC	4
MP30	8810008971	BT M2X3.5 NI-ZC3	6
MP31	8810009511	PHBT M2X4 NI-ZC3 (3.6-4.0)	3
MP32	8810009161	PHB0 M2X20 SUS SSBC	2
MP37	8930084870	3384 REAR SHEET	1
MP39	8930069620	2905 ANT PLATE Y846	1
MP40	8810006571	PH M2X2 ZC3	1
MP42	8930088220	SPONGE (MJ)	1
MP43	8930070630	O-RING (BK) (TOP)	1
MP44	8930087790	3495 WHITE SHEET	1
MP45	8930088230	SPONGE (MK)	2
MP46	8930088590	SHIELD SPONGE (DC)	1

[MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J100*	6510025130	30P9.0-JMCS-G-B-TF (N)	1
J251*	6510021901	BM02B-ASRS-TF (LF) (SN)	1
J300*	6510022692	06FLT-SM2-TB (LF) (SN) (M)	1
J301*	6510022692	06FLT-SM2-TB (LF) (SN) (M)	1
DS480	5030003670	L2-1365TVF <TES>	1
MC250*	7700002990	EM6027P-46C10&33-G <HOR>	1
S1*	2260003300	EVQPQHB55	1
S2*	2260003300	EVQPQHB55	1
S3*	2260003300	EVQPQHB55	1
S4*	2260003300	EVQPQHB55	1
S5*	2260003300	EVQPQHB55	1
S6*	2260003300	EVQPQHB55	1
S7*	2260003300	EVQPQHB55	1
S8*	2260003300	EVQPQHB55	1
EP360	8930087800	SRCN-3495-SP-N-W (SHJ)	2
MP360	8210028870	3495 REFLECTOR	1
MP361	8930087780	3495 LCD HOLDER Y1288	1
MP362	8950004430	DOUBLE SIDE TAPE (O)	2

[RF UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J101*	6510025121	30RF-JMCS-G-1B-TF (N) (LF) (SN)	1
S250*	2260002800	SW-167 (SKQTLAE010)	1
S328*	2260002800	SW-167 (SKQTLAE010)	1
MP20*	8510016471	2775 VCO CASE-1	1
MP21	8510017521	2905 VCO COVER-1 Y834A	1
MP50*	8410002620	2905 PA HEATSINK Y832	1
MP51	8510017590	2905 SHIELD PLATE	1
MP52	8860001400	2905 EARTH PLATE Y844	1

[MIC UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J415*	6510022692	06FLT-SM2-TB (LF) (SN) (M)	1
J416	6510021941	246S-550-4P-68 (JIS8)	1
W470	8910000070	FFC-1008 (P0.5N6L50)	1
MP1	8930087990	SHIELD SPONGE (DB)	1

[VR UNIT]

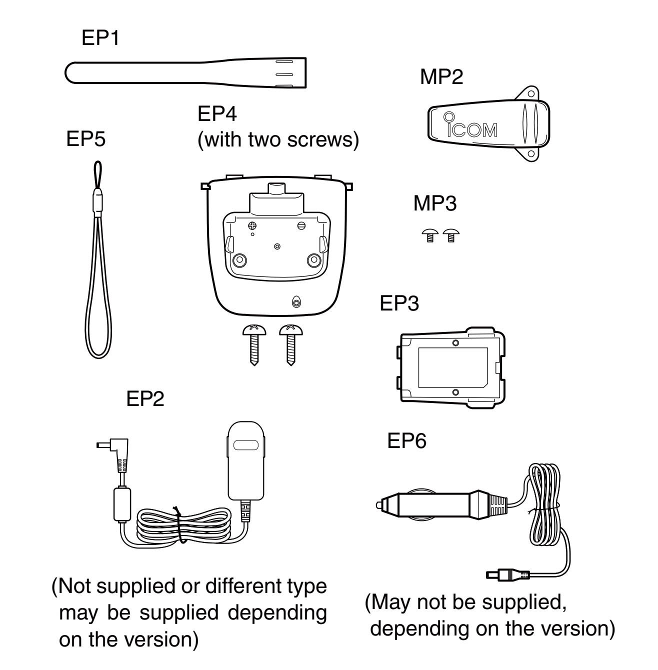
REF NO.	ORDER NO.	DESCRIPTION	QTY.
J416*	6510029480	06FH-SM1-TB (LF) (SN)	1
W801	8910000070	FFC-1008 (P0.5N6L50)	1

*: Refer to "**BOARD LAYOUTS**" for the location.

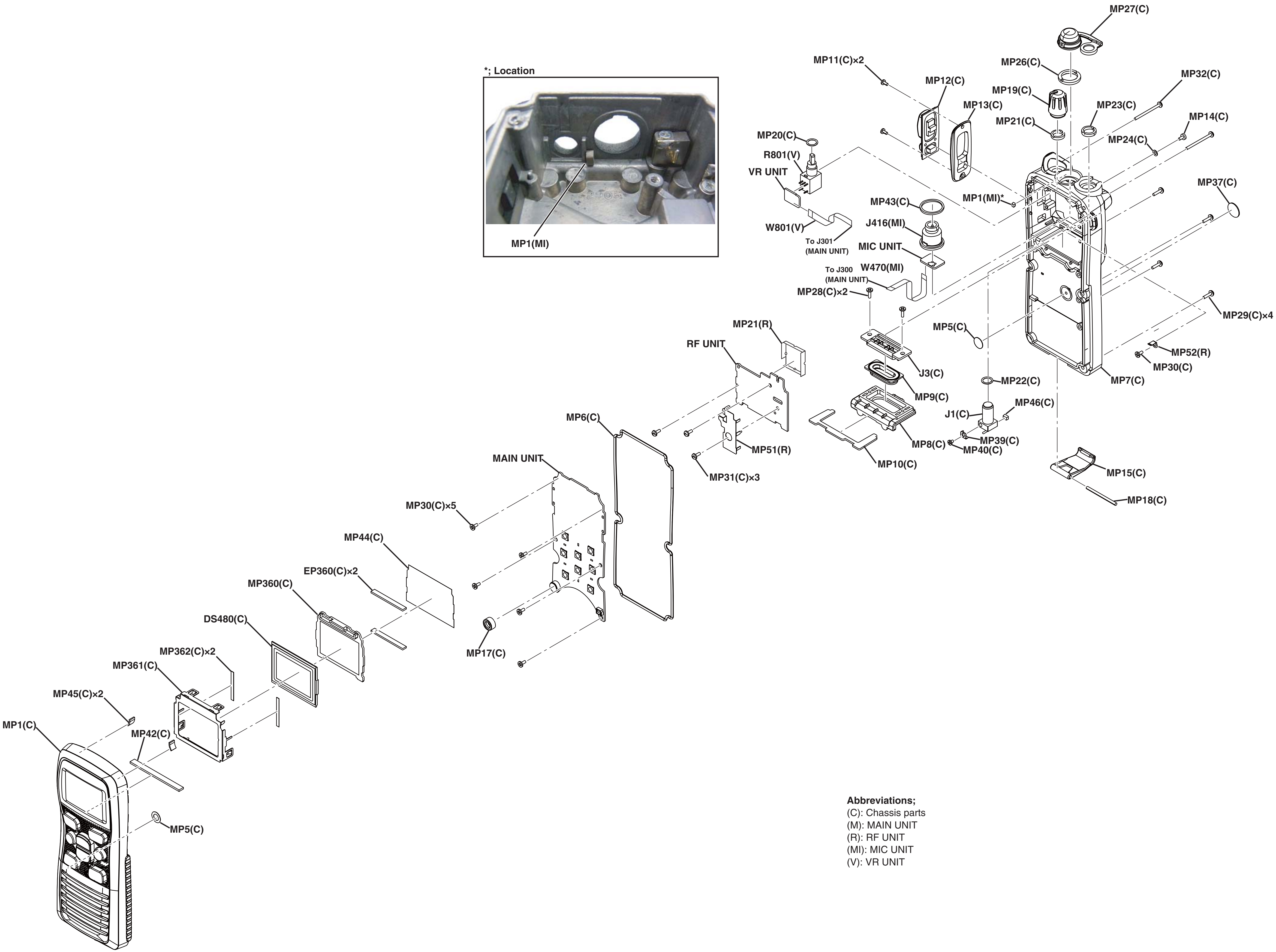
Screw abbreviations A, B0, BT: Self-tapping PH: Pan head ZK: Black NI-ZU: Nickel-Zinc SUS: Stainless

[ACCESSORIES]

REF NO.	ORDER NO.	DESCRIPTION		QTY.
EP1	(Optional)	FA-S64V	[USA]	1
	(Optional)	FA-S64V	[EXP]	1
	(Optional)	FA-S59V	[EUR-01]	1
	(Optional)	FA-S64V	[EUR]	1
	(Optional)	FA-S64V	[UK]	1
	(Optional)	FA-S64V	[FRG]	1
	(Optional)	FA-S64V	[HOL]	1
	(Optional)	FA-S64V	[AUS]	1
	(Optional)	FA-S64V	[USA-10]	1
	(Optional)	FA-S64V	[EXP-10]	1
	(Optional)	FA-S59V	[EUR-11]	1
	(Optional)	FA-S64V	[EUR-10]	1
	(Optional)	FA-S64V	[UK-10]	1
	(Optional)	FA-S64V	[FRG-10]	1
	(Optional)	FA-S64V	[HOL-10]	1
	(Optional)	FA-S64V	[AUS-10]	1
EP2	(Optional)	BC-123SA	[USA]	1
	(Optional)	BC-123SE	[EXP]	1
	(Optional)	BC-123SE	[EUR-01]	1
	(Optional)	BC-123SE	[EUR]	1
	(Optional)	BC-123SE	[FRG]	1
	(Optional)	BC-123SE	[HOL]	1
	(Optional)	BC-123SV	[AUS]	1
	(Optional)	BC-123SA	[USA-10]	1
	(Optional)	BC-123SE	[EXP-10]	1
	(Optional)	BC-123SE	[EUR-11]	1
	(Optional)	BC-123SE	[EUR-10]	1
	(Optional)	BC-123SE	[FRG-10]	1
	(Optional)	BC-123SE	[HOL-10]	1
	(Optional)	BC-123SV	[AUS-10]	1
EP3	(Optional)	BP-245H		1
EP4	(Optional)	BC-210		1
EP5	6910018620	BLACK HANDY STRAP		1
EP6	(Optional)	CP-25H	[USA]	1
	(Optional)	CP-25H	[EXP]	1
	(Optional)	CP-25H	[HOL]	1
	(Optional)	CP-25H	[USA-10]	1
	(Optional)	CP-25H	[EXP-10]	1
	(Optional)	CP-25H	[HOL-10]	1
MP2	(Optional)	MB-103		1
MP3	8810001470	PHA M3.5X30 SUS		2



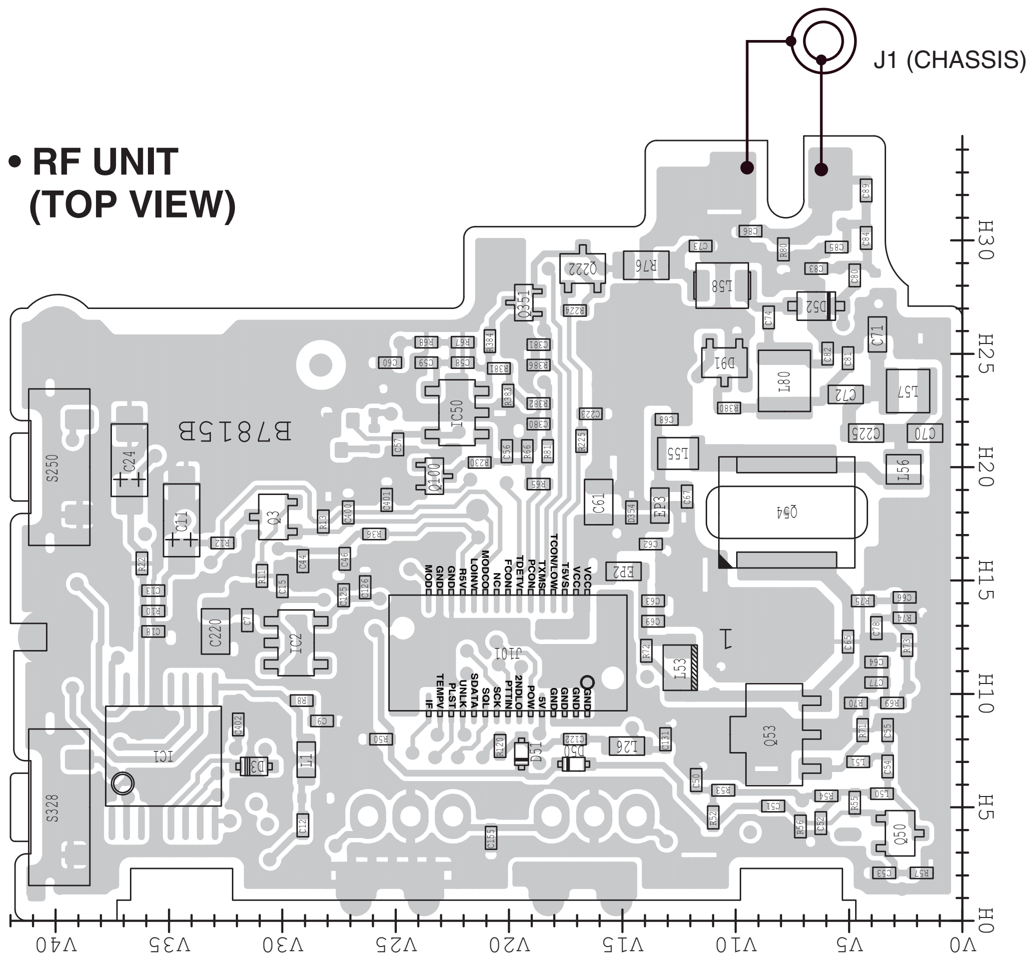
*: Refer to "**BOARD LAYOUTS**" for the location.
Screw abbreviations A, B0, BT: Self-tapping PH: Pan head ZK: Black NI-ZU: Nickel-Zinc SUS: Stainless



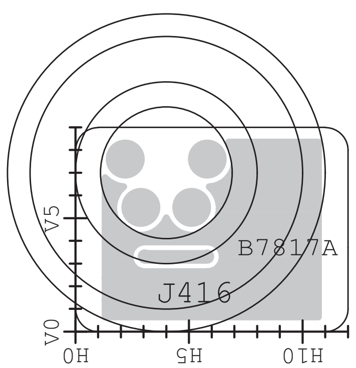
Abbreviations;
(C): Chassis parts
(M): MAIN UNIT
(R): RF UNIT
(MI): MIC UNIT
(V): VR UNIT

The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

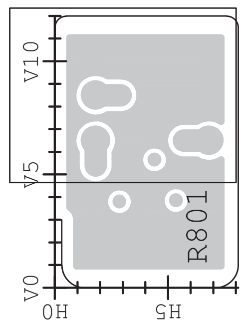
• RF UNIT (TOP VIEW)



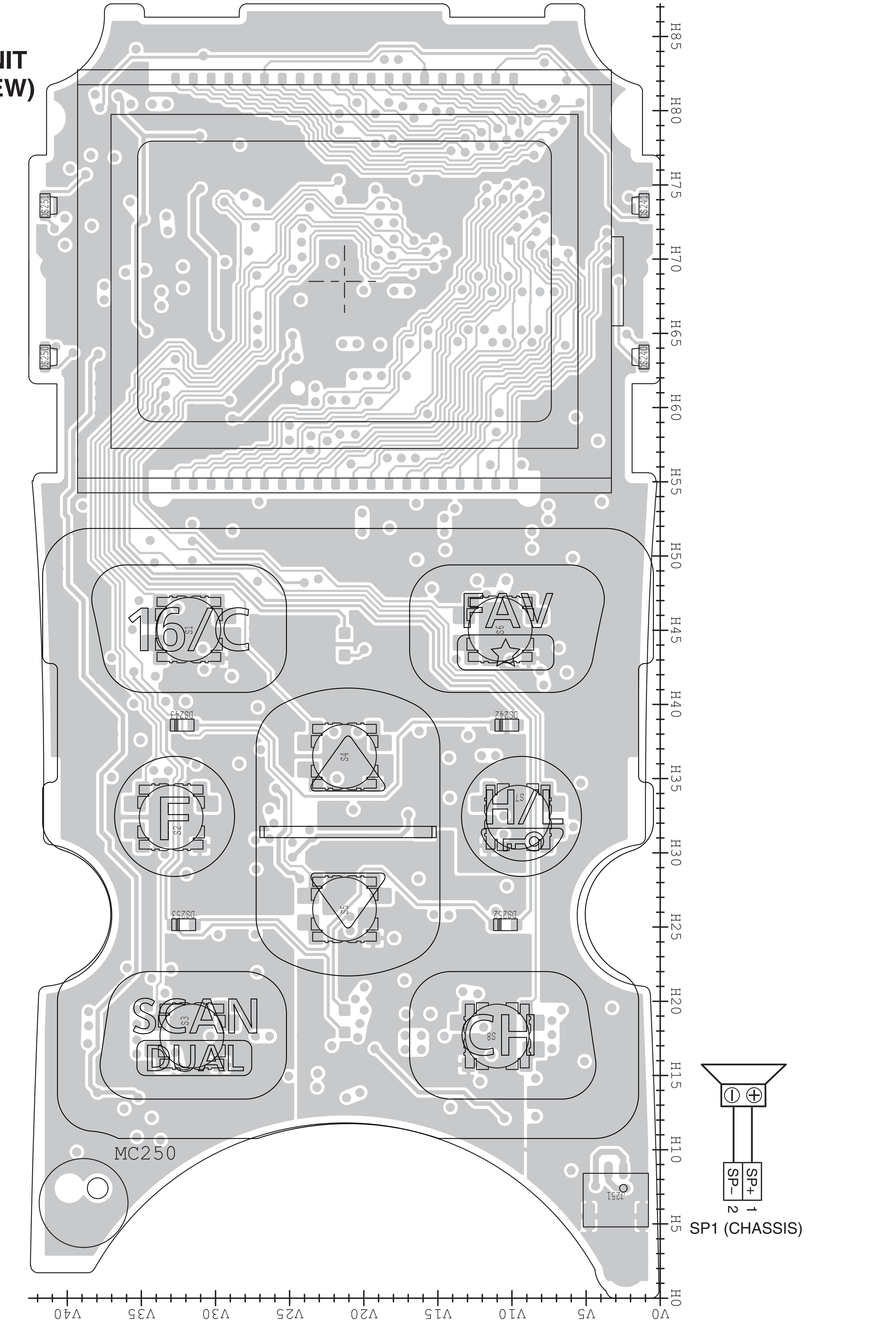
• MIC UNIT (TOP VIEW)



• VR UNIT (TOP VIEW)

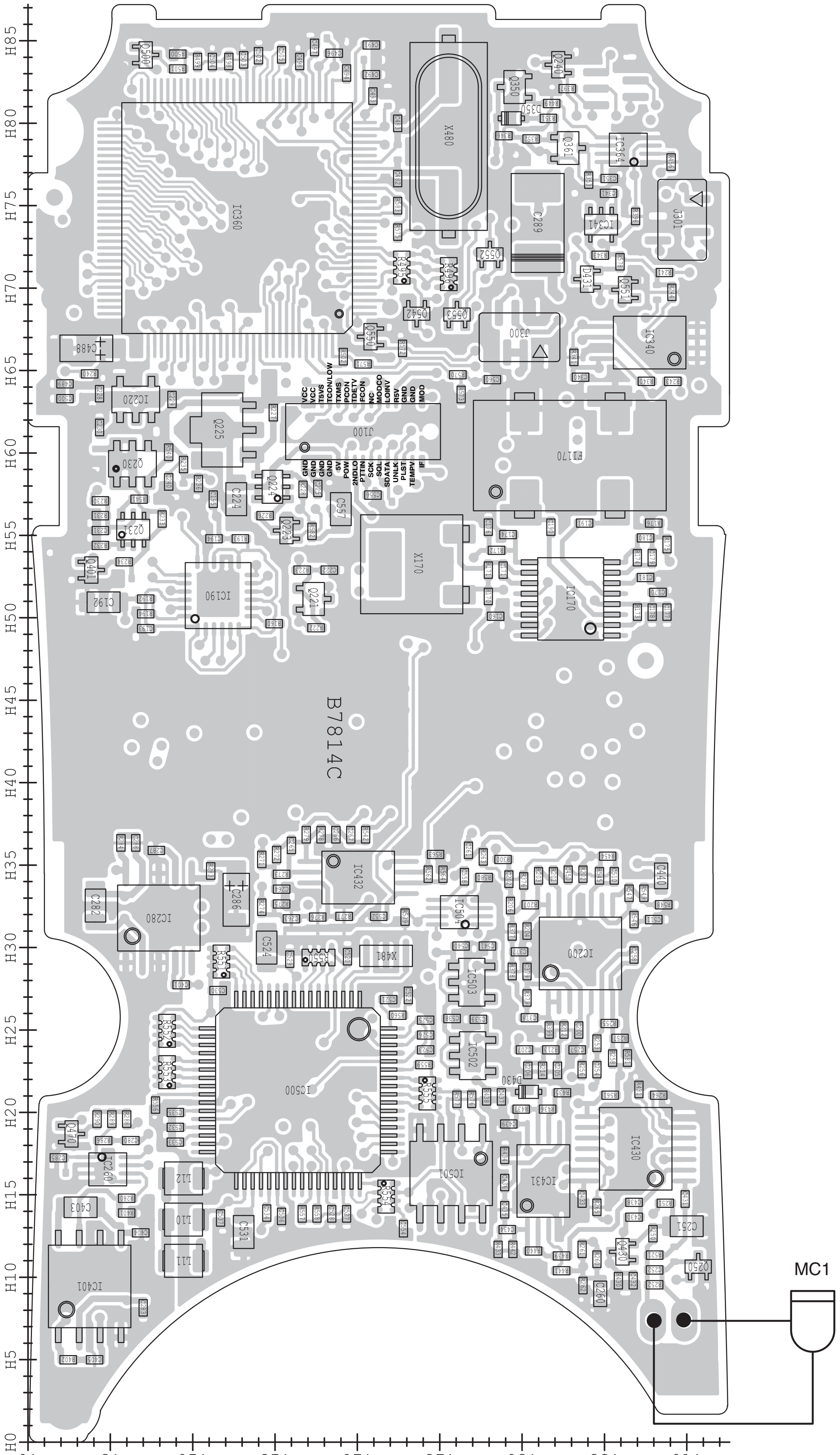


• MAIN UNIT (TOP VIEW)

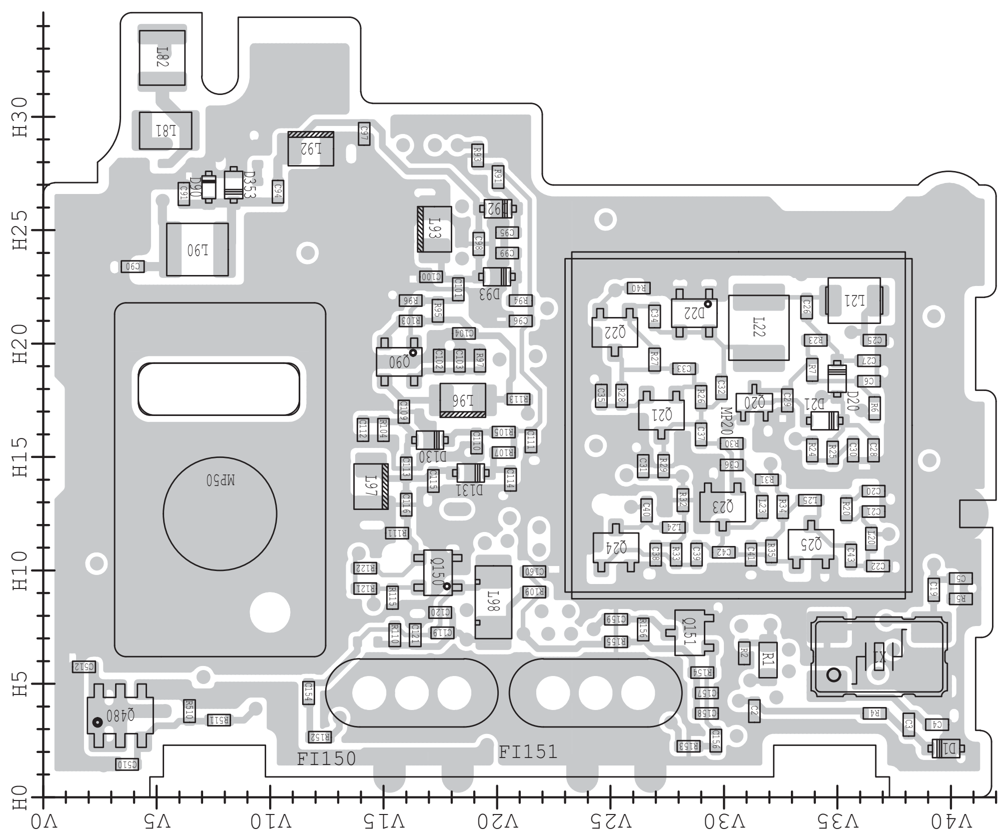


The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

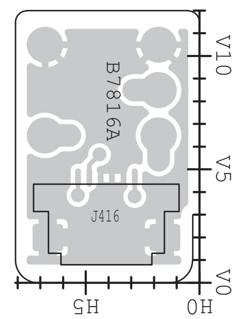
• MAIN UNIT (BOTTOM VIEW)



• RF UNIT (BOTTOM VIEW)



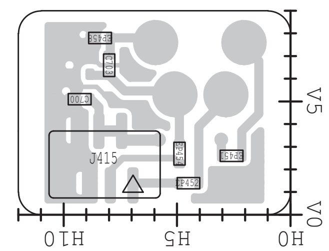
• VR UNIT (BOTTOM VIEW)



J416

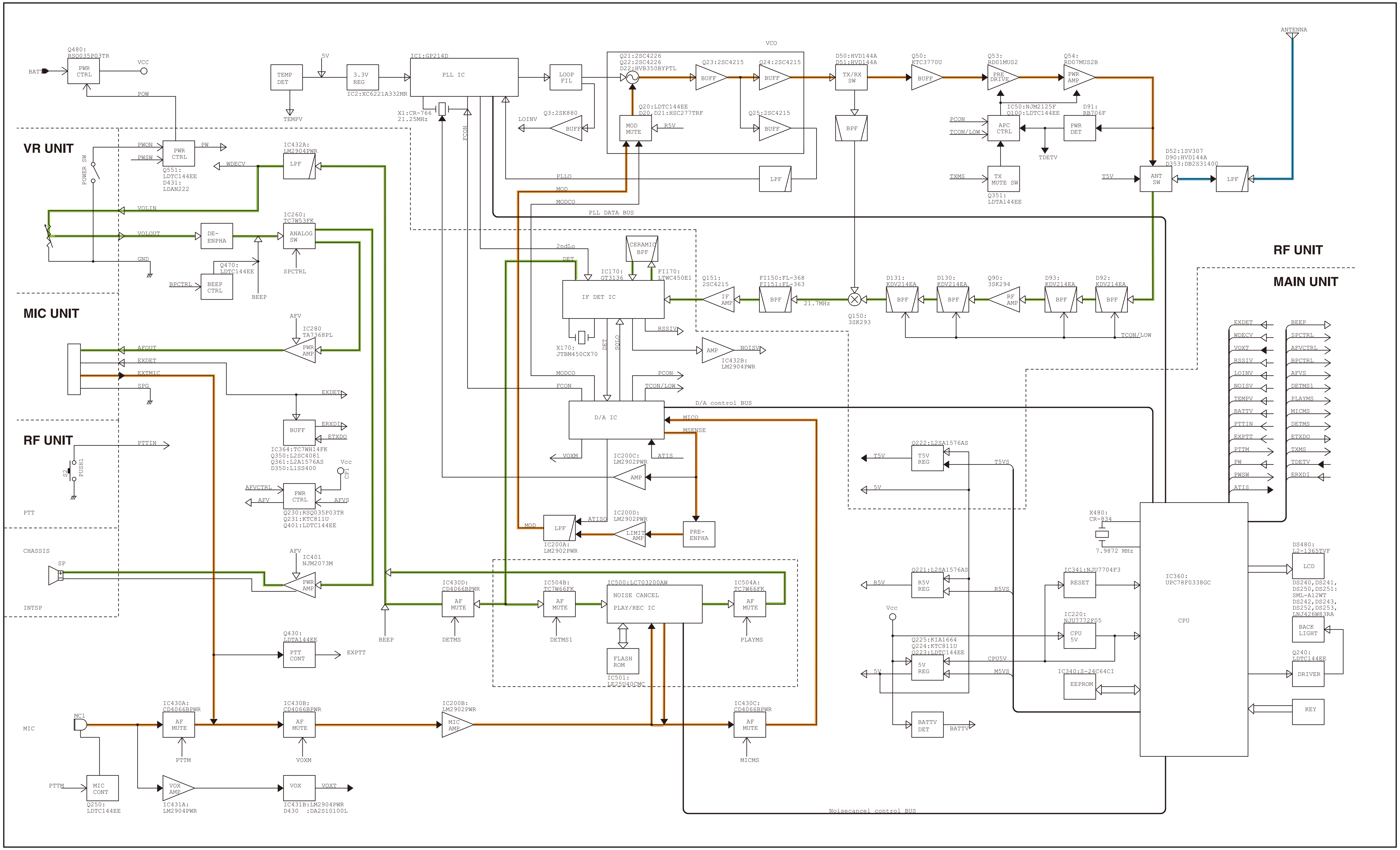
2	GND	PWON	1
	GND	GND	
	VOLIN	VOLO	
8	GND	GND	7

• MIC UNIT (BOTTOM VIEW)



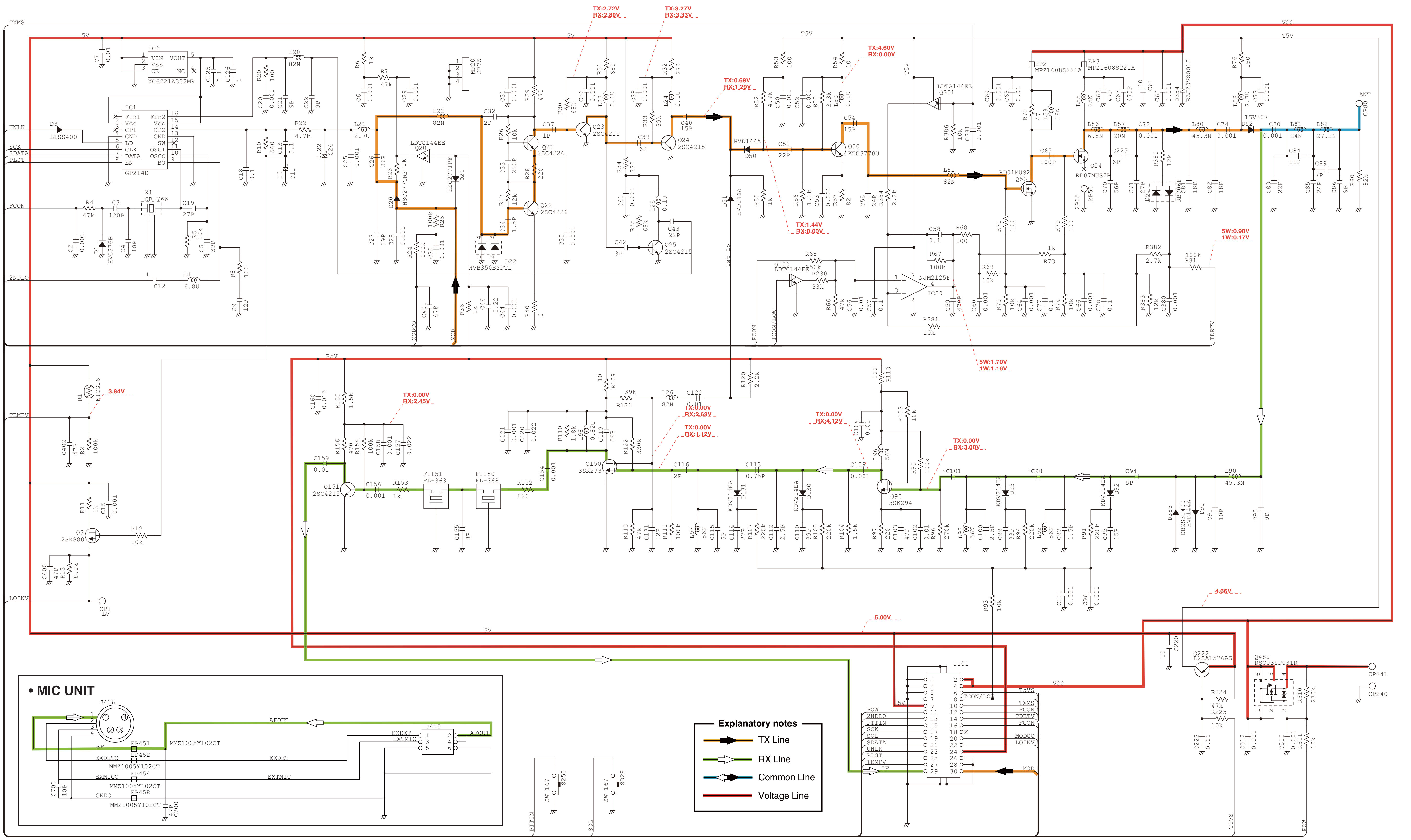
J415

2	AFOUT	EXDET	1
	AFOUT	EXTMIC	
6	GND	GND	5



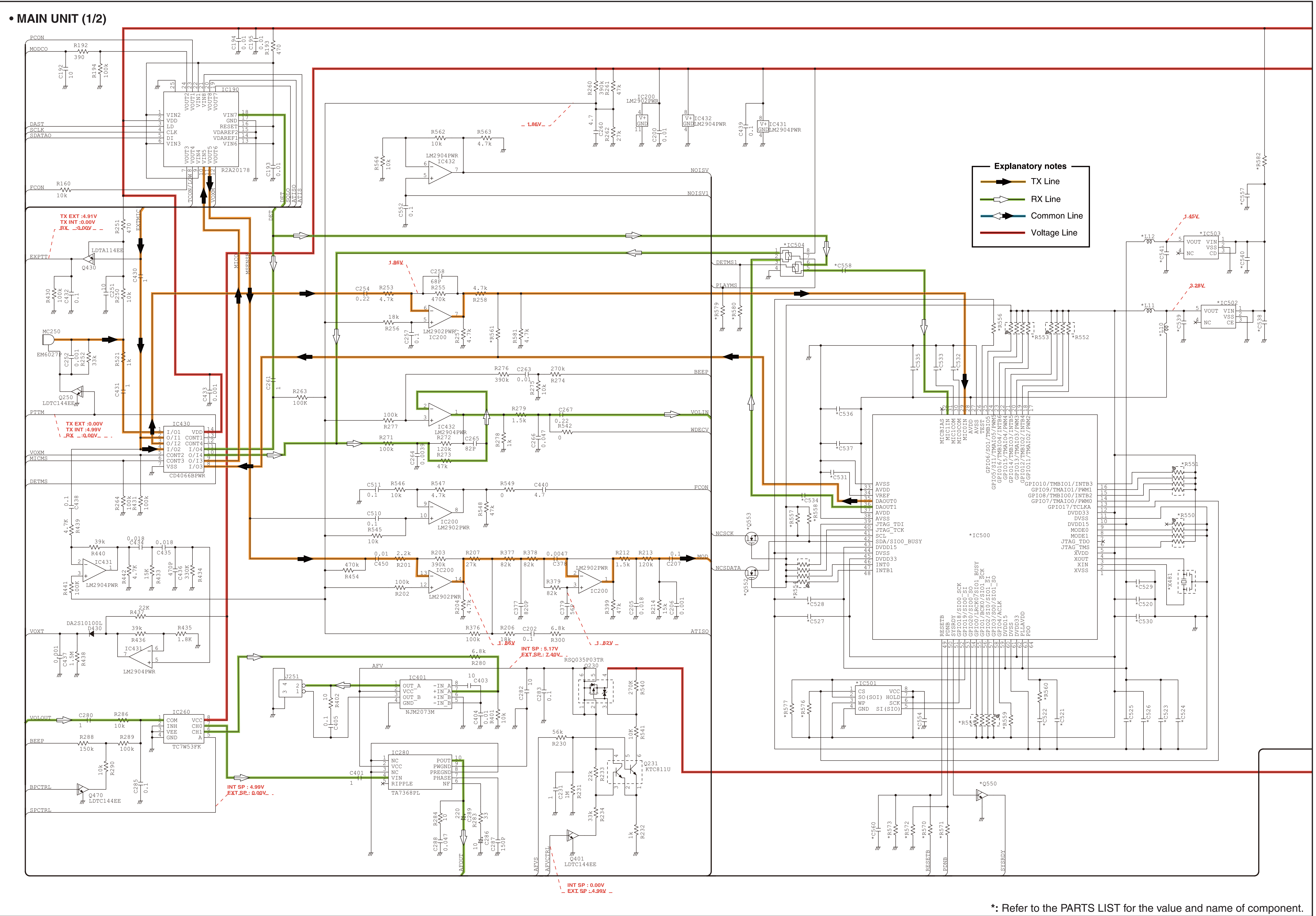
VR UNIT
MIC UNIT
RF UNIT
RF UNIT
MAIN UNIT
ANTENNA
VCO
BAT
PWR CTRL
Q480: RSQ035P03TR
VCC
POW
TEMP DET
TEMPV
5V
3.3V REG
IC2:XC6221A332MR
IC1:GP214D
PLL IC
X1:CR-766 21.25MHz
FCON
LOOP FIL
Q3:2SK880
BUFF
LOINV
Q21:2SC4226
Q22:2SC4226
D22:HVB350BYPTL
Q23:2SC4215
Q24:2SC4215
Q20:LDTC144EE
D20,D21:HSC277TRF
MOD MUTE
R5V
Q25:2SC4215
D50:HVD144A
D51:HVD144A
TX/RX SW
BPF
Q50: KTC3770U
Q53: RD01MUS2
PRE DRIVE
Q54: RD07MUS2B
PWR AMP
IC50:NJM2125F
Q100:LDTC144EE
APC CTRL
PCON
TCON/LOW
D91: RB706F
PWR DET
TDETV
TXMS
TX MUTE SW
Q351: LDTA144EE
T5V
ANT SW
D52:1SV307
D90:HVD144A
D353:DB2S31400
LPF
PLLO
MOD
MODCO
PLL DATA BUS
PWON
PWSW
PW
POWER SW
Q551: LDTC144EE
D431: LDAN222
IC432A: LM2904PWR
WDECV
VOLIN
VOLOUT
GND
DE-ENPHA
IC260: TC7W53FK
ANALOG SW
SPCTRL
Q470: LDTC144EE
BPCTRL
BEEP CTRL
BEEP
2ndLo
DET
CERAMIC BPF
IC170: GT3136
FI170: LTWC450E1
IF DET IC
Q151: 2SC4215
IF AMP
FI150:FL-368
FI151:FL-363
21.7MHz
Q150: 3SK293
D131: KDV214EA
D130: KDV214EA
Q90: 3SK294
RF AMP
D93: KDV214EA
D92: KDV214EA
TCON/LOW
RSSIV
X170: JTBM450CX70
SQLO
AMP
NOISV
IC432B: LM2904PWR
AFV
IC280 TA7368PL
AFOUT
EXDET
EXTMIC
SPG
BUFF
EBXDI
ETXDO
IC364:TC7WH14FK
Q350:L2SC4081
Q361:L2A1576AS
D350:L1SS400
Vcc
CP1
AFVCTRL
AFVS
Q230:RSQ035P03TR
Q231:KTC811U
Q401:LDTC144EE
MODCO
FCON
D/A IC
D/A control BUS
MICO
MSENSE
VOXM
IC200C: LM2902PWR
ATIS
PTTIN
PUSH1
S2
PTT
IC200D: LM2902PWR
LIMIT AMP
PRE-ENPHA
ATISO
IC200A: LM2902PWR
CHASSIS
SP
IC401 NJM2073M
INTSP
IC430D: CD4066BPWR
AF MUTE
DETMS
IC504B: TC7W66FK
DETMS1
IC500:LC703200AW
NOISE CANCEL PLAY/REC IC
FLASH ROM
IC501: LE25U40CMC
IC504A: TC7W66FK
PLAYMS
Q430: LDTA144EE
PTT CONT
EXPTT
IC430A: CD4066BPWR
PTTM
IC430B: CD4066BPWR
IC200B: LM2902PWR
MIC AMP
IC430C: CD4066BPWR
MICMS
MIC
MC1
MIC CONT
Q250: LDTC144EE
VOX AMP
IC431A: LM2904PWR
VOX
VOXT
IC431B:LM2904PWR
D430 :DA2S10100L
Noisecancel control BUS
Q222:L2SA1576AS
T5V REG
T5VS
Q221:L2SA1576AS
R5V REG
R5VS
Q225:KIA1664
Q224:KTC811U
Q223:LDTC144EE
5V REG
CPU5V
M5VS
BATTV DET
BATTV
X480: CR-834
7.9872 MHz
IC341:NJU7704F3
RESET
IC220: NJU7772F05
CPU 5V
IC340:S-24C64CI
EEPROM
IC360: UPC78F0338GC
CPU
DS480: L2-1365TVF
LCD
DS240,DS241, DS250,DS251: SML-A12WT
DS242,DS243, DS252,DS253, LNJ426W83RA
BACK LIGHT
Q240: LDTC144EE
DRIVER
KEY
EXDET
WDECV
VOXT
RSSIV
LOINV
NOISV
TEMPV
BATTV
PTTIN
EXPTT
PTTM
PW
PWSW
ATIS
BEEP
SPCTRL
AFVCTRL
BPCTRL
AFVS
DETMS1
PLAYMS
MICMS
DETMS
ETXDO
TXMS
TDETV
ERXDI

• RF UNIT



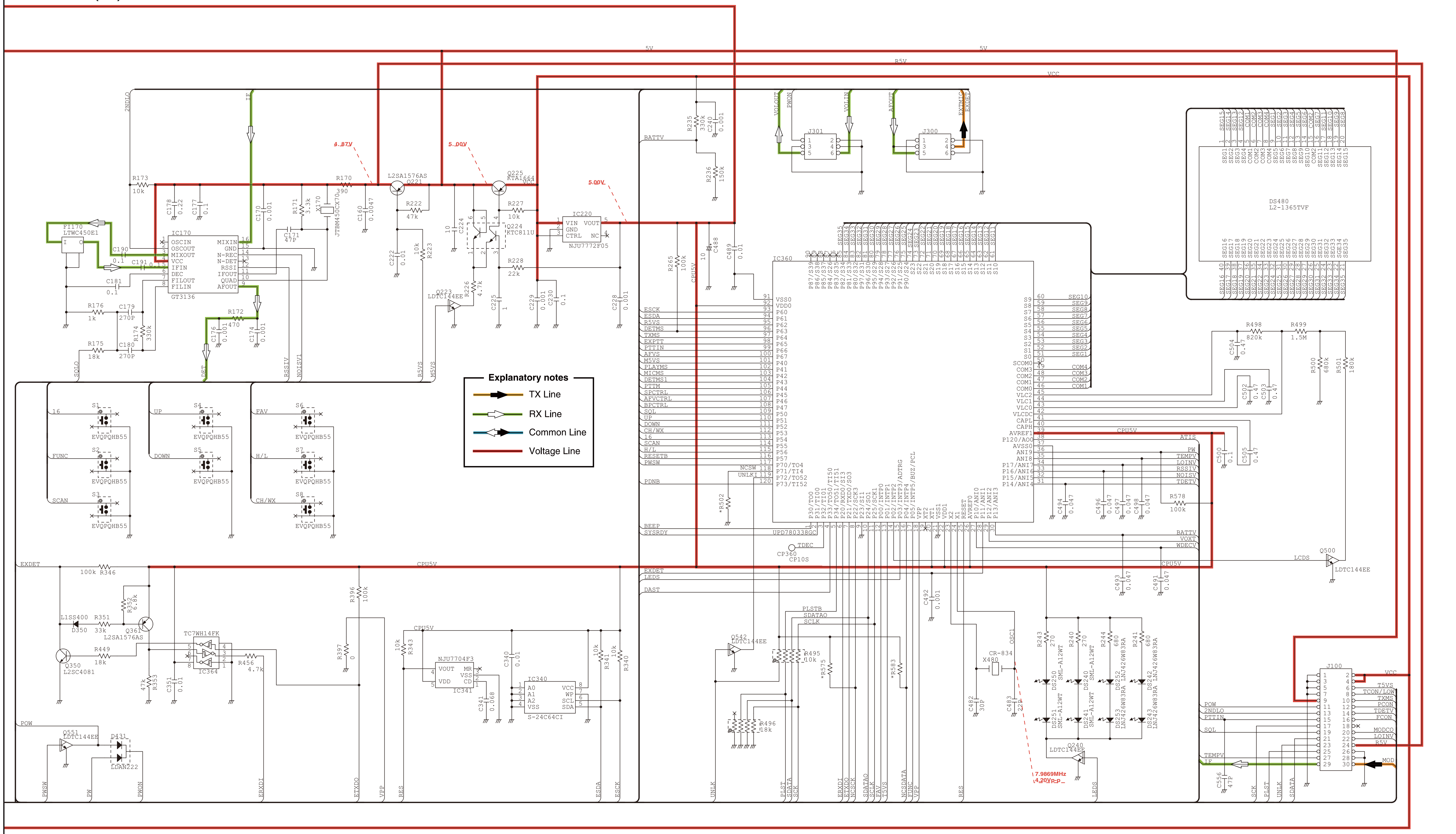
*: Refer to the PARTS LIST for the value and name of component.

• MAIN UNIT (1/2)



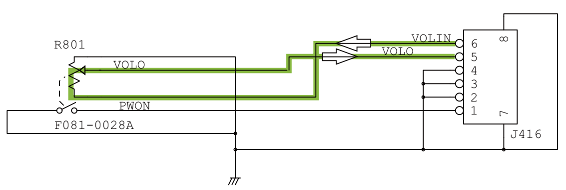
*: Refer to the PARTS LIST for the value and name of component.

• MAIN UNIT (2/2)



*: Refer to the PARTS LIST for the value and name of component.

• VR UNIT



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